HEALTH SCIENCES LIBRARY
OF THE
UNIVERSITY OF NORTH CAROLINA

This Book Mus
from the Divis
Affairs Buildin
This JOURNAL may
DAYS, and is subje
CENTS a day thereaf
DAY indicated belo

Digitized by the Internet Archive
in 2010 with funding from
North Carolina History of Health Digital Collection, an LSTA-funded NC ECHO digitization grant project

http://www.archive.org/details/carolinamedicalj491903char

DIVISION OF HEALTH AFFAIRS LIBRARY

Twenty-Sixth Year. JANUARY, 1903. Vol. 49. No. 1.

THE CAROLINA

Medical Journal.

SUCCEEDING THE NORTH CAROLINA MEDICAL JOURNAL.

Published Monthly at $1.00 per Annum, in Advance.

Robert L. Gibbon, M. D., Robert D. Jewett, M. D., W. H. Wakefield, M. D.

Editors and Proprietors.

Charlotte, North Carolina.

Nothing Left to Chance.

IN the preparation of *Parke, Davis & Co.'s Antidiphtheritic Serum* the element of guesswork never enters. Modern scientific methods mark every step in the process of production.

The biological stables are under the constant supervision of a skilled veterinary surgeon. They are provided with an abundance of light and fresh air and a perfect system of drainage.

Before admission to the stables each horse is subjected to a rigid physical examination. The tuberculin and mallein tests are applied to exclude tuberculosis and glanders. The animal is kept for ten days under strict surveillance in an isolation stable and rendered immune to tetanus by treatment with antitetanic serum.

In the processes of treatment with diphtheria toxin and of abstraction of blood all appliances are carefully sterilized. The toxin is injected and the blood withdrawn in accordance with the best methods of aseptic surgery.

The product is marketed in hermetically sealed glass bulbs, and every lot is physiologically and bacteriologically tested.

LABORATORIES: Detroit, Michigan, U. S. A. Walkerville, Ont., Canada. Hounslow, England.

PARKE, DAVIS & CO.

BRANCH HOUSES: New York, Kansas City, Baltimore, New Orleans, Chicago; London, Montreal, Sydney (N.S.W.)

When writing advertisers please mention this Journal.

LISTERINE

The standard antiseptic for both internal and external use.

NON-TOXIC, NON-IRRITANT, NON-ESCHAROTIC---ABSOLUTELY SAFE, AGREEABLE AND CONVENIENT

LISTERINE is taken as the standard of antiseptic preparations. The imitators all say, "It is something like LISTERINE."

BECAUSE of its intrinsic antiseptic value and unvariable uniformity, LISTERINE may be relied upon to make and maintain surgically clean—aseptic—all living tissues.

IT IS AN EXCELLENT and very effective means of conveying to the innermost recesses and folds of the mucous membranes that mild and efficient mineral antiseptic, boracic acid, which it holds in perfect solution; and whilst there is no possibility of poisonous effect through the absorption of LISTERINE, its power to neutralize the products of putrefaction (thus preventing septic absorption) has been most satisfactorily determined.

A special pamphlet on catarrhal disorders may be had upon application.

For diseases of the uric acid diathesis:

LAMBERT'S LITHIATED HYDRANGEA

A remedy of acknowledged value in the treatment of all diseases of the urinary system and of especial utility in the train of evil effects arising from a uric acid diathesis. A pamphlet of "Clippings" of editorials on this subject may be had by addressing:

LAMBERT PHARMACAL CO., ST. LOUIS.

Be assured of genuine Listerine by purchasing an original package.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

Library, Univ. of
North Carolina

Samples
and
Literature
supplied by

AGURIN
The Non-Irritating Diuretic.

EPICARIN
The Non-Toxic Dermal Parasiticide.

SALOQUININE
The Tasteless and Improved Quinine.

HEDONAL
The Promoter of Natural Sleep.

FERRO-SOMATOSE
The Ferruginous Nutrient and Tonic.

PROTARGOL
Antigonorrheal, Antiseptic

ASPIRIN
The Best Salicylate.

AN INFANT'S FOOD

AS a basis for preparing a substitute for human milk, it is agreed by authorities that Fresh Cow's Milk must be used.

Fresh milk contains the antiscorbutic element.

Sterilized, condensed, dried or desiccated milk does not contain it.

The addition of

MELLIN'S FOOD

to fresh milk is simply for modification.

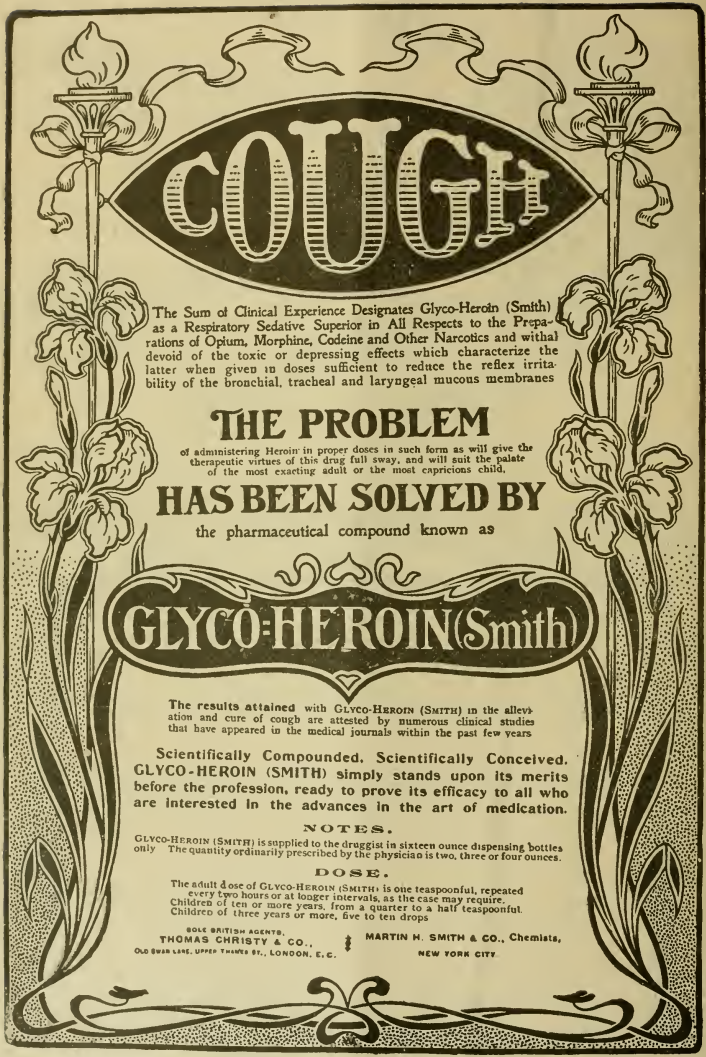
Fresh milk so modified still contains the antiscorbutic element and is easily and readily assimilated by an infant.

The subject of the

Home Modification of Fresh Cow's Milk

is concisely and interestingly treated in our illustrated book, cloth bound, which we should be pleased to send you free.

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS


COUGH
The Sum of Clinical Experience Designates Glyco-Heroin (Smith) as a Respiratory Sedative Superior in All Respects to the Preparations of Opium, Morphine, Codeine and Other Narcotics and withal devoid of the toxic or depressing effects which characterize the latter when given in doses sufficient to reduce the reflex irritability of the bronchial, tracheal and laryngeal mucous membranes
THE PROBLEM
of administering Heroin in proper doses in such form as will give the therapeutic virtues of this drug full sway, and will suit the palate of the most exacting adult or the most capricious child.
HAS BEEN SOLVED BY
the pharmaceutical compound known as
GLYCO-HEROIN (Smith)
The results attained with GLYCO-HEROIN (SMITH) in the alleviation and cure of cough are attested by numerous clinical studies that have appeared in the medical journals within the past few years
Scientifically Compounded, Scientifically Conceived. GLYCO-HEROIN (SMITH) simply stands upon its merits before the profession, ready to prove its efficacy to all who are interested in the advances in the art of medication.
NOTES.
GLYCO-HEROIN (SMITH) is supplied to the druggist in sixteen ounce dispensing bottles only The quantity ordinarily prescribed by the physician is two, three or four ounces.
DOSE.
The adult dose of GLYCO-HEROIN (SMITH) is one teaspoonful, repeated every two hours or at longer intervals, as the case may require.
Children of ten or more years, from a quarter to a half teaspoonful.
Children of three years or more, five to ten drops
SOLE BRITISH AGENTS.
THOMAS CHRISTY & CO.,
OLD SWAN LANE, UPPER THAMES ST., LONDON, E.C.
MARTIN H. SMITH & CO., Chemists,
NEW YORK CITY

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

PEACOCK'S BROMIDES

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.
DOSE:
One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day. OD CHEM. CO., NEW YORK.

St. Luke's Hospital,

1000 West Grace St.,
RICHMOND, VIRGINIA.

Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,
RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.

AS The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our

. . . regular eleven-ounce hexagonal bottle, . . .

you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

THE ANÆMIAS

yield readily to organic, or true animal iron treatment.

A resort to *inorganic* iron preparations or tonics, serves only to stimulate corpuscular proliferation without supplying sufficient nutrition to mature the blood cells.

A preparation of **TRUE ANIMAL IRON** that will supply every deficiency in the blood, and assure the proliferation of *all* the corpuscles to a full and sturdy maturity, is found in

BOVININE

It contains **10% ANIMAL IRON,** 20% coagulable albumen, and every element of nutrition of the animal, mineral, and vegetable kingdoms.

It is readily absorbed by the tissues, requires little or no digestion, is prompt and reliable in stimulation and support, and is a nutrient of the very highest value.

BOVININE administration causes quick increase of the leucocytes, and a consequent arrest of all pathological processes.

BOVININE is advertised to the Profession only, and is a strictly ethical physician's preparation. Its formula is open to all.

A postal request brings you our Hand-book on Haematherapy, giving valuable information to both the general practitioner and the specialist.

THE BOVININE COMPANY,

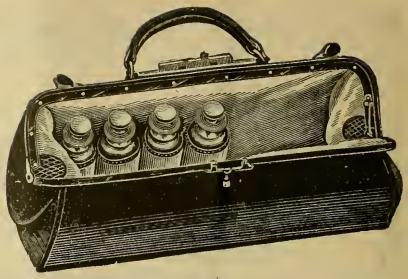
75 W. HOUSTON ST., NEW YORK.

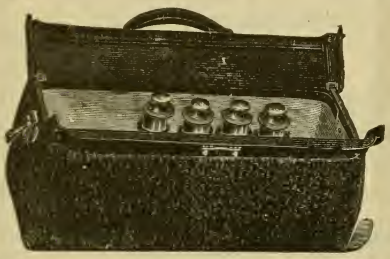
OBSTETRICAL BAG,

Lined With Chamois.

Price, including bottles:

15 inch	$4 25
16 "	4 50
17 "	4 75
18 "	5 00





Cabin Form Obstetrical Bags

Lined With Rubber Cloth and Built on Steel Frame.

Price, including bottles:

15 inch	$5 25
16 "	5 75
17 "	6 00
18 "	6 25

THE VALZAHN COMPANY,

Manufacturers and Importers of Surgical Supplies,

132 South Eleventh St., Philadelphia, Pa.

BROADOAKS SANATORIUM,

MORGANTON, NORTH CAROLINA.

A Private Hospital for the Treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

ISAAC M. TAYLOR, M. D.

JOHN McCAMPBELL, M. D.

100 TABLETS FREE. . . . . RETURN THIS AD.

ALKAGESTA

Trade Mark

(Alkaline Digestive)

Being an exposition of all the Vegetable and Animal Digestive Ferments that are active in the Alkaline secretions.

FOR THE TREATMENT OF

Intestinal Indigestion and Amylaceous Dyspepsia.

Alkagesta (Liquid) cost one dollar per pint bottle, and the dose is from one to four teaspoonfuls immediately before or after meals or both.

Alkagesta Tablets will not dissolve in the stomach, and cost on prescription 25c. for 35 tablets, or sold direct to the doctor in bottles of 500 or 1,000 tablets. Dose, one to three tablets before or after eating.

WATERBURY LABORATORIES, SELLING AGENTS,

12 West Broadway, New York.

ERGOTOLE S & D

IN TYPHOID FEVER

"For Intestinal Hemorrhage

ERGOTOLE HYPODERMICALLY

In Conjunction with Ice Water Enemata."

The Practitioners Manual, Pg. 365.

Made ONLY by

SHARP & DOHME

BALTIMORE

NEW ORLEANS ST. LOUIS CHICAGO

NEW YORK

In Oz. Bottles Only
Free Samples to
Physicians

Ergotole Never Causes Abscess.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

THE LITERARY DIGEST

An Illustrated Weekly Magazine of information and discussion on all chief subjects of human interest, as digested from the world's choicest periodical literature. The intelligent of every rank and creed consider that for the most profitable periodical reading published it excels:

BECAUSE when time is precious it enables you to make the most of every reading moment, providing you with the cream of nearly 1,000 of the world's most valuable periodicals.

BECAUSE it selects, translates, digests, or reprints the best literature to be found in the numberless periodicals printed in all lands, giving its subscribers the benefit of expert editorial skill and discrimination.

BECAUSE it enables you to greatly economize your expenditures for periodicals, making it possible to get the best articles in a greater number than you would ever subscribe for, and this for the price of only a single subscription.

BECAUSE regular readers of THE LITERARY DIGEST become versatile on all sides of topics of current interest and discussion in politics, science, literature, art, religion, etc.

Send in Your Subscription Now for the Next Year. $3.00 per Year. Single Copies, 10 Cents.

FUNK & WAGNALLS CO., NEW YORK.

Table of Contents.

PAGE

EDITORIAL:

Notes 1

Animal Hygiene 2

ORIGINAL COMMUNICATIONS:

What Shall be Done in Non-Penetrating Wounds of the Abdomen with Probable Visceral Lesions? R. L. Payne, M. D. 4

Some Phases of Albuminuria: William S. Gordon, M. D. 8

Etiology and Treatment of Acute Vulgaris: F. H. Beadles, M. D. 11

The Organization of the Medical Profession: George W. Pressly, M. D. 13

SELECTED PAPERS 17

NATURE AND SCIENCE 25

THERAPEUTIC HINTS 28

REVIEW OF MEDICAL AND SURGICAL PROGRESS 32

BOOK REVIEWS 40

MEDICAL NEWS AND ITEMS 42

NEWER MATERIA MEDICA 46

IF IN NEED
OF A RECONSTRUCTIVE, NERVE AND MUSCLE
BUILDER, WHERE THERE IS ALSO
A DEMAND FOR MORE AND
BETTER FLESH,
CORD. OL. MORRHUAE COMP.
(HAGEE)
WILL MEET ALL
REQUIREMENTS.
IT
CONTAINS all the potent
elements of cod liver oil, and has been thoroughly tested and fully endorsed by our most eminent physicians. It is no experiment to prescribe
HAGEE'S CORDIAL OF COD LIVER OIL
WITH HYPOPHOSPHITES OF LIME AND SODA
Dispensed in 16-ounce bottles by all Druggists
KATHARMON CHEMICAL CO., ST. LOUIS, MO.

Index to Advertisers.

	PAGE
Parke, Davis & Co. .....Cover	1
Lambert Pharmacal Co..... "	2
Mr. Fellows..... "	3
Presbyterian College for Women "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.	1
Martin H. Smith Co	2
Od Chemical Co.....	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.....	5
The Valzahn Co.....	6
Broadoaks Sanatorium.....	6
Waterbury Laboratories	7
Sharp & Dohme.....	8
Funk & Wagnalls.....	9
Katharmon Chemical Co.....	10
Mariani & Co.	11
The Antikamnia Chemical Co.	11
Oakland Chemical Co.	12
Battle & Co.	12
University of Pennsylvania.....	13
The Halcyon Retreat.....	13
Kress & Owen Co.	13
The Purdue Frederick Co.....	14
Rio Chemical Co.	14
Wm. R. Warner & Co.	27

	PAGE
Charles N. Crittenton Co.....	29
Vapo-Cresolene Co.....	31
The Keeley Institute.....	31
Dad Chemical Co.....	31
John Wannamaker.....	33
Dr A. M. Whisnant	37
Invalids Table Co.	37
Dr. E. R. Russell	39
Dr. A. J. Crowell.....	39
Dr. W. O. Nisbet.....	39
Dr. W. H Wakefield	39
Vade Mecum Spring Co.	41
Sultan Drug Co.	41
Robinson-Pettet Co.	43
The Terry Heater Co	45
Clinic Publishing Co.....	45
The Sorensen Mfg. Co....	47
W. D. Allison Co.....	49
Maplewood Sanatorium.....	49
Munn & Co.....	49
R. L. Polk & Co.....	49
Stone School of Scientific Physical Culture	51
N. Y. Poly. Med School and Hospital	52
The Charlotte Observer	52
Century Mfg. Co.....	52

Written endorsements from upwards of 8,000 physicians prove

VIN MARIANI

During 40 years invariably

"THE STANDARD PREPARATION OF ERYTHROXYLON COCA."

Most useful adjuvant in general treatment as a

TONIC, RESTORATIVE, MILD STIMULANT.

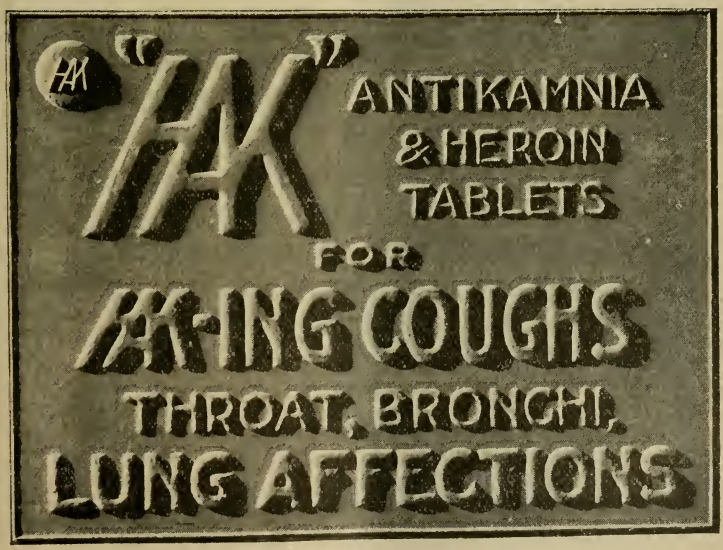
SENT POSTPAID:

80 Page, Illustrated Monograph by European and American observers, with formula, dose, etc., cloth-bound, will be forwarded postpaid to any physician on application.

PARIS: 41 Boulevard Haussman.
LABORATORY: Neuilly, Sur-Seine, France.
LONDON: 49 Haymarket.
BERLIN: 56 Charlotten Strasse.
MONTREAL: 87 St. James Street.

MARIANI & CO.,
52 West 15th St., New York.

VIN MARIANI on sale at Druggists throughout the World. CAUTION.—Refuse Substitutes, Avoid Disappointment.



Five-Grain Antikamnia Tablets
Laxative Antikamnia & Quinine Tablets
| AK |
Antikamnia & Codeine Tablets
Antikamnia & Heroin Tablets

ECTHOL, NEITHER ALTERATIVE NOR ANTISEPTIC IN THE SENSE IN WHICH THOSE WORDS ARE USUALLY UNDERSTOOD. IT IS ANTI-PURULENT, ANTI-MORBIFIC--A CORRECTOR OF THE DEPRAVED CONDITION OF THE FLUIDS AND TISSUES.

SAMPLE (12-oz.) BOTTLE SENT FREE ON RECEIPT OF 25 CTS.

FORMULA:--Active principles of Echinacia and Thuja.

BROMIDIA
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U. S. A.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

University of Pennsylvania

Department of Medicine.

The 138th Annual Session will begin on the last Friday in September, 1903, at 12 m., and will end at Commencement, the third Wednesday in June.

The Curriculum is graded, and attendance upon four annual sessions is required.

Practical Instruction, including laboratory work in Chemistry, Histology, Osteology, Bacteriology, Pathology, Physiology and Pharmacy, with bedside instruction in Medicine, Surgery, Gynæcology and Obstetrics, is a part of the regular course, and without additional expense.

For catalogue and announcement containing particulars, apply to

DR. CHAS. H. FRAZIER, Acting Dean,

36th St. and Woodland Ave., Philadelphia.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J G. Earnest, Diseases of Women.

Dr. W. F. Goldsmith, General Surgery.

Dr. C. C. Stockard, General Medicine and Drug Habits.

Dr. S. G. C. Pinckney, Nervous Diseases.

Dr. J. M. Crawford, Eye. Ear, Nose and Throat.

Dr. Michael Hoke, Orthopoedic Surgery.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

17 W. Cain Street, Atlanta, Ga.

THE ALKALINITY OF BLOOD SERUM

GLYCO-THYMOLINE

(KRESS)

ASEPTIC

ALKALINE, ALTERATIVE

A Purgative for Mucous Membrane

INDICATED IN ALL CATARRHAL CONDITIONS

HASTENS RESOLUTION
FOSTERS CELL GROWTH

SAMPLES AND LITERATURE ON APPLICATION

KRESS & OWEN COMPANY, 221 Fulton St., New York.

JUST NOW

when the debilitated and poorly nourished are subject to coughs and colds, the remedy of most value is

GRAY'S Glycerine TONIC Comp.

Its specific action on the respiratory organs is second only to its unique value in malnutrition and general debility

THE PURDUE FREDERICK CO.
No. 15 Murray Street, New York

A Useful Nerve Stimulant and Tonic.

CELERINA is a powerful stimulant WITHOUT the depressing AFTER-EFFECTS of alcohol, caffeine, nitro-glycerine, etc. It is also a reliable Nerve Tonic. A pleasant exhilaration is experienced after a dose of one or more teaspoonfuls, and under its continued use a renewed capacity for mental and physical exertion results. It is indicated in all forms of exhaustion, mental inertia and senile weakness.

DOSE: One or Two Teaspoonfuls Three Times a Day.

A FULL-SIZED BOTTLE SENT FREE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

RIO CHEMICAL CO., - - NEW YORK.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., JANUARY, 1903. No. 1

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

Subscription $1.00 per year, in advance.
Subscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
Receipts.—The receipt of all money is immediately acknowledged.
Important Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect otherwise we assume it their wish to have it continued expecting to receive a remittance at their earliest convenience.
We Notify all subscribers when their paid subscription expires

EDITORIAL.

The accomplishments of German medical men in the purely scientific, as well as the practical parts of medicine, has been the admiration of their brethren of other countries, and has had the effect of annually drawing large numbers of foreign students to German universities. Many Americans then will be surprised to learn of the relatively small incomes commanded by the rank and file of the profession in the land of Koch and Virchow. It is stated that ten years ago ten out of every seventeen physicians in the great city of Berlin did not earn more than $750 per year, and that only 250 earned more than $2,000 per year. The condition at the present time is said to be even worse. It is evident from this that our German colleagues must do a good deal of hard living as well as high thinking.

There are several considerations which probably explain the meagreness of medical incomes in that country. In the first place, despite a modern growth and industrial development only equaled by the United States, Germany is a poor country, not nearly so rich as France, for instance, and this would undoubtedly influence professional incomes. Again, the German physician has far less of the commercial spirit that is so prevalent in our own country—he cares far less though, as a rule, of how he should be fed or wherewithal he is to be clothed. On the other hand, his government is quick to recognize and substantially requite a distinguished service to science. In America we, too, often gauge a man's ability by the extent of his professional income.

In this connection it is interesting to note that the eminent Dr. Lorenz, of Vienna, has been offered a chair in a Chicago medical school at a far larger salary than he could get in his own country.

France is said to contain more people over 60 years of age than any other European country, the next greatest proportion of old people being found in Ireland. If this be true, there would seem to be something in the habit of

living in these two countries conducive to longevity. While noted far and wide for their skill in the art of cookery, the French as a people subsist upon a much lighter diet than do the English and Americans; while the poverty of Ireland and the popularity of the potato sufficiently indicate the diet of the masses in the Emerald Isle. This hypothesis may not be capable of demonstration, but it is at least suggestive.

ANIMAL HYGIENE.

The cause of antivivisection, if there be one, suffers much from the untruthfulness of its advocates. A triumph of missstatement has recently been achieved in a pamphlet entitled "What Better Than Serum." It is written seriously, and while it is not intended to take rank as comic literature, it does so from sheer incongruity. The aim of this article is not only to expose the uselessness of all serum therapy and vaccination, but also to indulge in some other generalizations that outrival the poets in imaginative flights. One of these aims is to prove that wild animals live physiological lives, and so efficiently maintain the ratio between repair and waste that they are never sick. The article quotes Seton Thompson's remark: "He who will explain the house sparrow's exemption from bateriological infection, the white bear's freedom from troubles that we attribute to uric acid in the blood, or the buffalo's and flamingo's immunity from the deadliest malaria, is on the way to conferring like immunity in man." Then the writer goes on to say: "Is it not that disease-breeding conditions are non-existing in the animal's system, owing to equalized waste and repair?—their food (scant provision to satisfy keenest hunger) obtained only after long search and activity. Is not this the animal's physical salvation? Wild animals, we learn, die from old age or sudden death only. Whereas man, so irresistibly tempted with his luxurious board, given over to sedentary habit, sows daily the seeds of disorder, and the system inactive becomes a fit rendezvous for all diseases which need imperfection to feed on."

There is only one objection to all this—it is not true. Whether the buffalo be free from malaria or no, and not being entirely familiar with the domestic habits and eccentricities of the flamingo, it may still be asserted that birds suffer keenly from malarial infection. As is well known, the mosquito theory of malarial transmission has been confirmed by observations on hematozoic infection in birds. The statement then that wild animals die from old age or sudden death must be taken *cum grano*. As a matter of fact animals may die of anything, from malignant tumor to heart disease. Tuberculosis is widely prevalent among them. Anthrax is a deadly and rapid cause of death. Influenza is nearly always present among them, and Mr. George Fleming, in his interesting work on animal plagues, enumerates eighty-six epidemics affecting wild quadrupeds and birds, and twenty-seven affecting fishes. Only a supremely ignorant individual could make such a statement as this, that wild animals die "from old age or sudden death only."

There is, of course, much doubt as to how some animals die. In the arctic regions, where life during the short summer is numbered by millions, and where there is a greater number of birds and large and small animals gathered together than in any other part of the globe, the remains of dead animals are said never to be found, notwithstanding the severity of the winter

which is always at their heels. How these animals dies is a mystery; nevertheless they do die.

Man might doubtless derive many useful principles of right living from the jungle, but before we pattern our hygienic existence after animals it would certainly be well that these animals purge their communities of those objectionable diseases from which they manifestly suffer, and which they convey to us—glanders, hydrated disease, trichinosis, tapeworm, and probably tuberculosis find their ways from them to us. By conforming to the habits of wild animals man might perhaps achieve more admirable methods of life, though it is unlikely he would become less of an antivivisectionist by doing so, as the ordinary table manners of the lion and the tiger leave something to be desired in that way. He might, however, add something to sanitary science by studying the sepulchral systems of ants and fishes, and might often find a safe return to sane thinking by relying more implicitly upon the data furnished by physiological instincts.—*Editorial in Medical Age, Dec. 25, 1902.*

Bronchitis from Adenoids.

Mery, according to an abstract in *Amer. Med.*, states that the inflammation of the nasopharynx which exists in patients suffering from adenoids may spread to the bronchi and give rise to a severe bronchitis, accompanied by signs of emphysema. The curative treatment is removal of the adenoid vegetations. He recommends the following medication in addition:

R	Syr. ipecac.	℥iiss	10 |
	Sodii benzoatis	gr. xv	1 |
	Sodii bicarb.	gr. viii	| 50
	Syr. polygala (senega)	℥v	20 |
	Decoct. polygala	℥iv	120 |

M. Sig.: One teaspoonful every hour.

Mustard poultices should be applied to the chest and hot drinks given; morning and evening a small quantity of the following pomade should be introduced into the nares by means of an applicator:

R	Acidi borici	℥i	4 |
	Resorcin	gr. iii	| 20
	Vaselini	℥i	30 |

M. Sig.: Apply locally. The patient's mouth must be closed; he will then draw the pomade through the nose. Instead of the introduction of the foregoing a few drops of mentholated oil, 1 to 100, may be used in the form of a spray. Later stimulating expectorants such as terpin hydrate in doses of one-half to one grain will be of use.

During convalescence one to two teaspoonfuls of the following may be taken every morning:

R	Sulphuris sublim.	℥iiss	10 |
	Mellis rosæ	℥iii	90 |

M. Sig.: One to two teaspoonfuls in the morning.

A Most Seasonable Suggestion.

As the time is fast approaching when there is a demand for cough remedies, it will not be amiss to present a suggestion and a good remedy. In place of opiates, which always dry up expectoration, disturb digestion, cause constipation, and render the patient uncomfortable and drowsy, it is desirable to employ the most efficient and popular cough sedative of the present day, namely: Antikamnia and Heroin Tablets. This remedy relieves cough by its soothing effect upon the air passages, but does not interfere with expectoration, and, in fact, renders it easier by stimulating the respiratory muscles. Only a very small dose, one tablet, every one, two or three hours, for adults, is required to produce a satisfactory result.—*Notes on New Pharm. Products.*

The Carolina Medical Journal

ROBERT L. GIBBON, M. D., ROBERT D. JEWETT, M. D., W. H. WAKEFIELD, M. D.
Editors and Proprietors.

COLLABORATORS.

H. T. Bahnson, M D , Salem, N. C.
J. Howell Way, M. D , Waynesville, N. C.
J. Allison Hodges, M D , Richmond, Va.
S Westry Battle, M D , Asheville, N. C.
Geo. G Thomas, M D., Wilmington, N. C.
J. P Munroe, M D , Davidson, N. C.
Manning Simons, M D , Charleston, S. C.
S. C. Baker, M. D , Sumter, S. C.
R. L Payne, M. D , Norfolk, Va.
H. S. Lott, M D., Winston, N. C.
J. W. Long, D D , Salisbury, N. C.
H. A. Royster, M. D . Raleigh, N C.
Albert Anderson, M D., Wilson, N. C.
Francis L Parker, M. D , Charleston, S. C.
Chas W Kollock, M D., Charleston, S. C.
Davis Furman, M D., Greenville, S. C.
F. Julian Carroll, Summerville, S C
Translation and Foreign Reviews, Richard H. Whitehead, M D , Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.
Contributors for the Original Department of The Journal are received, with the understanding that they are contributed exclusively to this Journal
Illustrations necessary to elucidate the text will be provided without expense to authors when suitable ink drawings or photographs are furnished.
Scientific Articles, Clinical Memoranda, News Items, etc , of interest to the profession are solicited for publication

ORIGINAL COMMUNICATIONS.

What Shall Be Done in Non-Penetrating Wounds of the Abdomen With Probable Visceral Lesions?*

By R. L Payne, M. D , Surgeon St. Vincent's Hospital, Norfolk, Va.

In penetrating wounds of the abdomen—gunshot and stab-wounds chiefly—the rule is well established that exploratory laparatomy must at once be done, the extent of the mischief determined and all lesions accurately repaired. This procedure has resulted in a steady decline in the death rate in such cases, but in a large class of traumatisms within the abdomen, unmarked by penetration of the addominal walls, and in many cases giving no external evidence of violence, the attitude of the profession is much too constantly one of incertitude and delayed interference, resulting very commonly in the death of the patient.

It will not do either for the interests of the patient or the reputation of our profession that we content ourselves with a diagnosis of "probable grave internal injury," while we stand still and do nothing. The findings of thousands of autopsies show that in this class of cases "internal injury" means grave hemorrhage from laceration of important blood vessel; extensive lacerations of the peritoneum; rupture of the hollow viscera; contusions, even to pulpification and extensive tears of the spleen, liver and kidney.

The great difficulty with which we are brought face to face when called upon to treat such cases is that of diagnosis. The thing that above all others makes a decision as to what plan of treatment shall be pursued so difficult, is that even in the worst non-penetrat-

*Read before the Association of Surgeons Southern Railway, Washington, D. C., June, 902.

ing intra-abdominal injuries there is often not the slightest external evidence of the serious conditions that confront us.

The yielding character of the abdominal walls make it possible that they shall escape without visible injury, while the contained organs may be lacerated to any extent, and even in cases of superficial bruises, the real injury may be found in parts of the abdomen remote.

Grave shock, often conjoined with the signs of concealed hemorrhage and the presence of severe and protracted abdominal pain, accompanied in many cases by persistent vomiting, are usually the only evidences we have to guide us. True, in the presence of shock and abdominal pain the vomiting of blood may indicate injury to the stomach. Rather sudden and rapidly developed tympany, due to free gas in the abdominal cavity, as shown by obliteration of the liver dullness, are almost proof of rupture of the stomach or intestines. Localized pain and tenderness, accompanied by shock out of proportion to the apparent injury, and followed in a few hours by rigidity of the abdominal walls, give reasonable proof of internal injury. If the injury is to the kidney, the pain is usually most marked in the loin, is often described as boring in character, usually radiates into the groin and testicle of the corresponding side, and if there is much resulting hemorrhage there will be progressive anaemia haematuria, and the development of tumor in the loin, to be followed, if operation is delayed, by suppuration about the kidney or hydronephrosis of pyonephrosis.

If the pain is most marked in the region of the spleen or liver, accompanied by the signs of concealed hemorrhage, we are apt to find a laceration of one of these organs, and will usually get dullness on percussion over the flanks and lower abdomen. The presence of fixed pain in the lower abdomen points to injury of the bladder; the presence of bloody urine to injury of the kidney, bladder, or urethra. If the catheter brings a free flow of bloody urine, the injury is probably to the kidney; if only a small quantity (usually only a few drops) there is probably rupture of the bladder; while in rupture of the urethra there is usually escape of blood from the meatus, the catheter is passed, if at all, with great difficulty and withdraws clear urine if the bladder and kidney have escaped injury.

These are the principal symptoms on which we must rely in forming our conclusions, and when taken with a history of a severe blow, a heavy fall or a crushing injury involving the abdomen, are of great significance, but after all nothing definite is known and nothing definite or hopeful can be done in the way of relief if we are to depend on external evidence alone for guidance. In the light then of these facts, I propound as an axiom in surgical treatment, "Given a reasonable diagnosis of internal abdominal injury, exploratory laparatomy must be promptly done."

The following cases, from my own practice and that of my colleagues, are illustrative.

Case 1. (Practice of Dr. Payne.) A. C., male, was riding on top of a rapidly moving wagon, over a very rough country road, when the wagon turned over and he was thrown violently to the ground. There were no external marks of violence, but the man was at once seized with violent pain in the lower abdomen and symptoms of intense shock supervened. The insertion of a catheter, in response to violent but futile efforts to micturate, brought

away only a very small quantity of bloody urine. The shock was prolonged, general peritonitis rapidly set in and the man died on the third day. Autopsy revealed a ruptured bladder. This case occurred several years ago, but a prompt laparatomy under modern methods would probably have saved this man.

Case 2. (Practice of Dr. Field.) C. G., captain of a tugboat, was towing a heavy barge. The hawser parted and one of the free ends struck the man in the abdomen. There was no external evidence of injury except a slight bruise between the ribs and the ilium on the right side. There was decided shock, lasting for many hours, and the symptoms going from bad to worse, the man died on the fifth day.

The autopsy showed the peritoneum matted together and containing a large amount of pus, principally in the smaller cavity, while the under surface of the right lobe of the liver showed a long perpendicular rent.

Case 3. (Practice of Dr. Ruffin.) Miss M. Y. fell down several steps of a stair-way, striking the seat of a chair with the lower chest and upper abdominal wall. There was very little shock, but intense pain and soreness in lower chest and upper abdomen. The patient vomited some blood and voided bloody urine. The doctor did not see the patient for forty-eight hours, and then found abdominal muscles rigid on left side, some abdominal tenderness and tympany and tenderness in left lumbar triangle. Exploratory laparatomy was advised and accepted. Section was made through abdominal wall to left of rectus muscle. Nothing was found wrong within the peritoneum, but an accumulation of blood could be seen behind the posterior peritoneum, pressing forward the colon and running down into the pelvis. The abdominal wound was closed and a new incision made to the inner side of left lumbar muscle. A clot as large as a man's first was turned out of the fat around the kidney and the upper pole of the kidney was found lacerated entirely through the cortex for a distance of two inches. After careful cleansing, tube and gauze drainage was inserted. The urine drained away freely for ten days and then stopped. The temperature gradually subsided and the patient made a good recovery.

Case 4. (Dr. Payne's practice.) J. T., male, aged 18, was trying to make fast two barges with a line. The barges were drifting together, and losing his foothold, he slipped and was caught with his pelvis between the two barges. When brought into the hospital, several hours after the injury, he was laboring under considerable shock, was complaining of great pain in the lower abdomen and there was constant straining efforts to micturate, but without result. The abdominal tenderness would not permit percussion.

There were slight contusions over both hips, but no marks of violence over either the abdomen of perinaeum and no fracture of the pelvis could be detected. A catheter was introduced, apparently entering the bladder, but nothing save a few drops of blood were obtained. Rupture of the bladder was diagnosed and an exploratory laparatomy was done. On entering the belly, the peritorium was found discolored by contusion, but the bladder was found intact, moderately distended with urine and torn away from the pubis so that the hand was easily inserted between the two.

The abdominal wound was closed except for a good sized rubber drain, which was carried down between the

bladder and pubis. The patient was now placed in the lithotomy position and perineal section done. The urethra was found entirely cut in two near the neck of the bladder and there was a rough, jagged fracture of the ramus of the ischium, which was probably responsible for the severed urethra and extensive laceration of the soft parts. The urethra seemed entirely destroyed for the distance of about an inch, and the fingers readily passed up behind the pubic bone, so that the lower end of the abdominal drain was caught and brought out of the lower incision. My best efforts to suture the ends of the divided urethra failed, and so I had to content myself with inserting a drain into the bladder and bringing the free end out of the perineal wound. A few days later, under chloroform, a full-sized rubber catheter was brought down through the urethra and carried by forceps under guidance of the finger into the bladder. This was withdrawn and a fresh catheter inserted (always under chloroform) every five or six days, until gradually a new urethral wall was built up around the catheter, the abdominal and perineal wounds closed and the man made a fine recovery.

During the whole time of treatment the urine was kept aseptic with cystogen, and for a long time after the healing of the wounds was completed great difficulty was experienced in preventing cicatricial contraction of the newly-formed urethra, but under the systematic use of sounds, all has gone well and the patient is again in good health and doing a man's work.

The first two of these cases serve to show how grave abdominal injuries, perfectly amenable to treatment if treatment be promptly instituted, may exist with but slight external evidence of their presence, and how in the presence of such injuries death is inevitable without recourse to operation.

The second two cases show how difficult it is to determine what injury will be found in the abdomen until, an exploratory laparatomy being done, such light is obtained as will enable one to move intelligently to the cure of his patient.

An exploratory laparatomy properly done is a comparatively harmless procedure. In internal abdominal injuries it is the only means by which we can determine what it is necessary to do to save the life of our patient, and even though it may sometimes be needlessly done, little harm will result, while in by far the greater number of cases it will be found the only means of relieving such injuries as being neglected mean the certain death of the patient.

One word remains to be said as to the proper time for operation. If the symptoms be due to internal hemorrhage, then operation must be done with the least possible delay, because waiting can only result in lessened chances for the patient's recovery; but if the symptoms are probably due to rupture of the stomach or bowels, then it is better to wait for at least a partial recovery from shock, because to operate too quickly would probably mean such added shock that the patient might succumb while extravasalian of the contents of these organs is rarely very rapid or very great in quantity.

If the symptoms be due to hemorrhage, we make the diagnosis by the usual symptoms differentiating hemorrhage from shock, while in addition there is often localized dullness over the front of the abdomen or dullness appears in the most dependent parts, such as flanks or the pelvis, or the finger in

the rectum, or vagina, may detect an accumulation of fluid in the pouch of Douglas.

In conclusion, by way of emphasis, let me repeat, "A diagnosis of internal abdominal injury demands exploratory laparatomy."

Some Phases of Albuminuria.*

By William S Gordon, M. D., Richmond, Va., Professor of Practice of Medicine, University College of Medicine.

Neither the subject of this paper nor the conclusions arrived at are new, but the following cases may throw additional light upon certain mooted points in connection with the appearance of albumin in the urine.

Case 1. A healthy looking young man of good physique and excellent habits, was examined for life insurance, and informed that his urine contained a trace of albumin. My examination confirmed the discovery and revealed a few small hyaline casts. The patient's mother suffers from gout, and he himself has had slight manifestations of uricacidemia. He has been exercising vigorously at boat-rowing. A quiet life and regulation of his diet resulted in a prompt disappearance of the morbid urinary conditions.

Case 2. A young man, apparently in good health, applied to me for life insurance examination. The urine contained a trace of albumin. He was a free meat-eater. Restriction of the diet to vegetables, fruits and easily digested articles caused a disappearance of the albumin, an increase of flesh and strength, and a marked improvement in physical and mental vigor.

Case 3. A young man was refused insurance on the grounds above mentioned, and placed himself under my care. He was troubled with intestinal indigestion. Regulation of his diet, meats being interdicted, was followed by marked improvement in his health and a normal condition of the urine. In this case there was, in addition to a small amount of albumin, an abundance of octohedral calcium oxalate crystals. His father, who indulges rather freely in flesh food, has albumin and casts in his urine at present.

Case 4. A young man of nervous temperament and with a tendency to hypochondriasis, was found to have intermittent albuminuria. After repeated examinations of the urine, I discovered uric acid and small hyaline casts. His general appearance was indicative of perfect health. He has been quite an athlete. The measures adopted in Case 1, and the assurance that he did not have chronic or acute nephritis, resulted in the establishment of normal urine.

Case 5. A young man, a physician, consulted me for slight albuminuria, which he stated was intermittent and ordinarily present only after assuming the upright position. I failed to find albumin or casts on several examinations. His life required a good deal of physical exertion. The usual treatment produced the usual results.

Case 6. A young professional man came under my treatment for albuminuria. Casts were present at intervals. Strict dieting produced little difference in his condition. A faint mitral murmur of insufficiency was finally detected. Rest was followed by almost complete return of the urine to the normal.

Case 7. A young primipara, who has been under my observation for some weeks, has had considerable renal disturbance, was delivered a few days ago of a dead-born child at the beginning

---

*Read before the Richmond Academy of Medicine and Surgery, November 25, 1902

of the ninth month. The indication of labor had been contemplated, but was postponed on account of the subsidence of mild uraemic symptoms. At the time of labor the urine contained one-half volume of albumin and a number of casts mostly hyaline, but partly granular and epithelial. The urea amounted to fifteen grains in the ounce, and had been increasing along with the albumin. Nature intervened and settled the question of responsibility.

Several of these cases illustrate what has been variously termed physiological, cyclic, intermittent, periodic, and functional albuminuria. Albumin is, at times, accidentally discovered in the urine, and doubtless has frequently been present and disappeared without producing symptoms that could be recognized either by patient or physician. The condition has come and gone like a thief in the night; but the questions arise, Has any loss been entailed or any damage done, and what were the circumstances favorable to the thief's visit? There are careful clinicians and pathologists holding the view that transient and slight albuminuria is physiological, but the more I study these cases the more am I convinced that albumin in the urine, whether it be in small amount or of short duration, is pathological.

Let us take a reasonable, scientific view of the question. If a meal overrich in proteids be ingested and albumin be found leaking out of the renal blood vessels in the glomerulus, it would seem that two pathological processes are taking place: first, imperfect digestion and assimilation, with its necessary attendant, faulty metalolism; and, second, an impairment of the epithelium in the capillary tuft or the enclosing capsule. Physiology teaches and proves that complete or partial anaemia of the tuft is followed by albuminuria; and it appears reasonable to believe that albumin does not occur in urine unless the secreting and excreting renal structures are morbidly affected. If this be true, physiological albuminuria is a misnomer, whether it be the result of functional disturbance or of organic changes. Function is physiological; impairment of function is pathological in the correct acceptance and definition of the term.

In studying the cases cited it will be observed that too much exercise, too much proteid food, nervous disorder, cardiac diseases and bodily position were responsible, either singly or combined, for the albuminuria. In one instance the patient's safety valve action of the right heart relieved him of cardiac or pulmonary congestion, but caused a passive renal congestion. In another instance mitral insufficiency, so faint as almost to defy detection, resulted likewise. Another patient was irritating his kidney epithelium with crystals of uric acid and calcium oxalate. In every instance the physiological processes of the body were more or less crippled, and the consequence was a morbid or pathological condition, no matter how slight, how transient, or how harmless for the time it lasted.

If, accordingly, transient albuminuria is not to be regarded as a normal occurrence, then it should be regarded as an indication of disordered health, and should receive the careful treatment of the physician; for there are good grounds for believing that the frequent recurrence or the long continuance of such conditions will eventually lead to permanent and possibly organic disease. In every case of albuminuria, diligent search ought to be made for its various causes, and the examiner for life insurance, in particular, should not

recommend an applicant who has even a trace of albumin in his urine on the ground that it can be considered a physiological condition.

In a letter received recently from the medical director of a life insurance company, the writer expresses his belief that a certain number of cases of slight albuminuria are due to unconfessed or unrecognized syphilis. That this disease may produce amyloid degeneration of the kidney is well known, and some authorities claim that specific infection is responsible for certain cases of cyclic, intermittent, or slight permanent albuminuria. On the other hand, we have just seen that many other causes can be assigned. My own belief is that a large proportion of the cases under discussion are due to uric acidaemia or to some kind of gastro-intestinal disorder.

The last case reported is interesting from the fact that, contrary to what is usually observed in such patients, the urea and albumin both increased in amount. The problem to solve related not so much to the danger of eclampsia, for uraemic symptoms, as stated, had disappeared, but to the probability of persisting renal disease after the uterus was emptied. We are all convinced that albumin and large casts may be present for some length of time in the urine and disappear, leaving a healthy kidney; and that absence of albumin and even of casts is occasionally noted during the course of chronic interstitial nephritis. I can recall a marked illustration of the latter truth, the patient having uraemic insanity, yet the urine being, at intervals, free from albumin and casts. We are thus led to believe that albumin and casts may not be of serious significance, but that diminution of urea is always to be regarded as a dangerous condition, although the system may tolerate considerable amounts of this excretion product.

It may not be amiss, in this connection, to express my belief that the experiment of injecting urea into animals in order to prove its comparative innocuousness is unscientific and untrustworthy. Let urea be injected into a human subject whose kidneys are diseased and unable to excrete it, and I venture to assert that a prompt exhibition of its injurious effects will follow.

Another truth, it seems to me, is taught by this case of pregnancy. It is that albumin, in a great measure, taken from the blood in the glomerulus of the kidney and that urea is excreted from the neck of the tubule around which the second set of vessels are entwined. Such is the teaching of physiology, proven by experiment and corroborated by pathology and clinical observation. Albumin and hyaline casts are not desirable and ought to receive immediate attention, but decreases in the amount of urea is the most important sign in the pathology and treatment of renal disease.

DISCUSSION.

Dr. Greer Baughman was impressed with the question of the importance of the diminution of urea in albuminuria. He had seen not a few cases in which this diminution was the diagnostic point depended upon. Referring to the presence of albuminuria and casts in the pregnant, he called particular attention to the fact that, although the patient might escape serious consequences in the first and second pregnancies, as the number increased, evidences of disease of the kidneys surely would be found. Even if the urine returned to the normal condition, the kidneys would not be absolutely healthy.

Dr. Ramon D. Garcin was particu-

larly struck with the possibility of even traces of albumin bearing on life insurance. He agreed with Dr. Gordon, though he did not always reject the applicant unless the causative condition warranted him for doing so. Recently, he had read an article in which it was stated that not one of the applicants who had albuminuria had lived out his expectancy. Dr. Gordon's case of pregnancy was unique. He agreed with the statement of Dr. Baughman regarding the production of renal disease by succeeding pregnancies, and mentioned a case in point.

Dr. A. G. Brown, Jr., stated that in making a differential diagnosis of albuminuria, four points were to be considered: 1. Physiologic, or cyclic albuminuria, the existence of which was very much to be doubted. 2. Extra-renal causes, which might be found in a number of cases, viz: chyic, seminal discharges, blood and pus from the urinary tract, etc. 3. Albuminuria with no very great renal involvement, e. g., anemia, purpura, scurvy, lead-poisoning, etc. 4. Bright's disease in various forms, and other marked kidney changes.

Dr. Gordon, in concluding the discussion, said that albuminuria in itself, might pass away and do no harm, but that it always meant something pathological. The subject of life insurance was extremely important; and to examiners it was often embarassing to determine when to reject and when to recommend. The cases had to be studied a long time. A slight albuminuria enabled one to suspect that there was something back of it, and, therefore, it behooved us to examine the urine carefully to check the disease in its incipiency. Dr. Baughman's point as to albuminuria in pregnancy was a most valuable one. In his own case, with the excretion of fifteen grains of urea daily, he did not fear eclampsia; but what would be the condition of the kidneys hereafter? Albumin was still being excreted two days after delivery. He was retained in a case in which there had been previously threatened eclampsia. Urinary examination made before the third labor revealed granular casts and a trace of albubinuria; but the case was watched closely and delivered normally, the casts and albumin having, in the meantime, disappeared. He agreed with Dr. Baughman, and warned his patients not to become pregnant until repeated examinations showed normal urine. Even then, one could not always tell whether or not the kidneys were sound.

Etiology and Treatment of Acne Vulgaris.*

By F. H Beadles, M. D., Richmond, Va, Professor of Botany and Pharmacognosy and Lecturer on Diseases of the Skin, Medical College of Virginia.

This paper has been written to review in the simplest manner our knowledge of the etiology and treatment of this apparently simple, yet distressing affection of the skin. I think I use the word "distressing" advisedly, for this disease robs many an individual of that coveted possession—physical beauty.

The most important etiological factors in the production of acne vulgaris are: Age, gastro-intestinal disturbances, disturbances of the generative organs.

It is common to describe the changes incidental to puberty in both sexes as a frequent cause of this condition, but a physiological crisis is rarely a disease factor, unless the full and normal development of the period be prevented by accident, disease or malnutrition, or

*Read before the Richmond Academy of Medicine and Surgery, October 28, 1902.

by excessive demands upon the vital organs. There is no doubt that the increased growth of hair in both sexes at puberty occasions an unusual activity of the sebaceous glands. While thousands pass the age of puberty without being effected with acne, the disease, none the less, is prone to appear first at this time of life, and if not properly treated to spontaneously disappear when full maturity of the body is reached.

That gastrointestinal disturbances play an important part in the production of acne is demonstrated by the frequent existence of an acne in individuals affected with indigestion, constipation and dyspepsia, or those who indulge excessively in cheese, pastry, sweets or highly seasoned foods.

There is no doubt that a close physiological connection exists between the genital organs, their functions, and the skin, not only in man, but also in the lower animals. It is common to note the aggravation of an acne just before or during the menstrual flow. Masturbation and continence have each been blamed as excitants of this condition. While the former of these, itself, does not cause acne, its well known effects on the nervous, moral and physical condition of growing youths would sufficiently account for any part it may have in producing this affection. Neither is there proof that continence is a cause of acne. Therefore, it is safer for us to attribute their presence to bad sexual hygiene rather than to masturbation or continence.

Treatment.—It is an acknowledged fact that acne is a remedial disease when properly managed. It is true that scars of ancient ravages are sometimes almost indelible, but even these may be smoothed down by continued treatment so that yearly they become less conspicuous and disfiguring. The constitutional treatment depends for success upon the discovery of the cause of the disease. In a large per cent. of cases the question of diet is a most important one. A marked improvement generally follows the reduction of the amount of food ingested, particularly meats; while a diet restricted to milk, bread, fish, fruits and the lighter vegetables will usually benefit the most obstinate cases.

An essential part of the treatment is the daily sponging (except during the menstrual epoch) of the entire surface of the body except the face (which requires special treatment) with water as cool as can be tolerated, followed by brisk rubbing with a coarse towel until the skin is glowing.

Of the agents used for their specific action on the skin, the most commonly used in arsenic. It is a drug which is known to exert an influence upon the epithelia of the skin; and upon these, so far as its therapeutic effect is concerned, only when they are the seat of sub-acute and chronic exudations. By comparison of the experience of experts, it has been shown that the common practice of giving arsenic for this condition is both harmful and irrational, not only because of its effect in producing cutaneous congestion, but also on account of the reliance placed in it to the exclusion of other and better methods of treatment.

Calcium sulphide, also long esteemed, is now classed with the ludicrous specimens of therapeutic empiricisms.

I should not attempt to review the various plans of local treatment which have been advocated for this condition, but rather to outline a single plan, which, when followed closely, is productive of the happiest results.

In determining the method of treat-

ment, it is well to consider three conditions which are usually present in the skin of such patients—hyperkeratosis, flaccidity of the muscles and hypersecretion.

As the face is the commonest seat of the disease, for the purpose of description it may be considered as the part effected. First, the surface is rendered aseptic. A massering ball is then rotated freely over the surface, deep pressure being made over the affected region with the result of bringing into view groups of previously inconspicuous comedones, which are in turn removed with an extractor. A ring curette is next drawn over the lesions, expressing their contents and stimulating others to activity. The subsequent bleeding is encouraged by sponging with hot water. The patient is then directed to bathe the face thoroughly for ten minutes, just before retiring, with spirits of green soap and water as hot as can be born, after which the face is wiped dry and some astringent lotion, which is allowed to evaporate on the surface, is applied. A lotion which I have found highly beneficial is composed of the following:

R Zinc sulphas ..... drachm j
Potass. sulphuret .... .. drachm j
Aquae rosae, q s ... . ounces iv
M

The Organization of the Medical Profession.*

By George W. Pressly, M. D., Charlotte, N. C

Within the past few years a great effort has been made to bring into our compact organization all the physicians living in the United States. In this great work the American Medical Association, through its leaders, has been the prime mover and most earnest worker. After the reorganization of this Association, a committee was appointed to suggest a constitution which would bring all the State societies into line in this undertaking. At this time the relation of the State to the National Association was very indefinite and not well defined, and the National Association, instead of representing the entire profession of the country, simply represented the locality in which the annual session was held.

Under the plan recommended by the committee, all this has been changed and the American Medical Association made a truly representative body of every section of the country. But this reorganization scheme not only concerns the National and State Associations, but every local society as well; in fact, the local society has been made the door to the entire buildings, and for this reason the Charlotte Medical Society should be interested and willing to consider the essential features and conditions of the proposed organization.

It is hardly necessary in this day and time to waste words in the discussion of the advisability of organization. Surely there is no disposition to question the propriety of all of us coming closer together for the sake of peace and harmony and for the advancement of the dignity and honor of the profession.

We might discuss the question whether the crooks in Charlotte live together more amicably than do the doctors, or whether the bricklayers of the city are better organized or not, but the value of living together as units in our great society needs no argument. To begin with the local society, the plan proposed in general is this: Each local society is to be a county society made

*Read before the Charlotte Medical Society, Jan. 20, 1903.

up of every reputable physician in that county, the State society to consist of every county society in that State, and the National Association to include every State society in the land. To adopt this plan it would mean that the Charlotte Medical Society would become the Mecklenburg Medical Society, and its membership would include every reputable physician in the county and every member would be by virtue of his local membership, a member of the State Association, and through his delegate he would have a voice in the American Association. Both the State and National Association would have delegates and regular members, the delegates to look after and decide all ordinary business, and the regular members to do the purely scientific work. All members of local societies would be regular members of the State Association, and each county would elect its own delegate to look after the ordinary business. This separation of the business from the scientific work would increase the value of a State meeting more than a hundred per cent. to the average physician. Our State societies meet only once a year, and of necessity there is a great deal of business, election and wire-pulling, and all of this takes place in the general meeting to the detriment of the scientific part of the program. The doctor who has left his practice to spend a few days with his brothers, and incidentally to pick up any information he can, is disgusted with the lack of interest in the papers or the discussion, and he goes home perhaps never to return again. How often is it that an election packs the hall while a really scientific paper is read to empty chairs. How great would be the improvement if the meeting was purely in the interest of science. In the plan proposed the business would be more carefully considered by a few well chosen men who would represent somebody, and the general session would be left free to discuss medicine without let or hindrances, and this plan would not only help the State Association, but the county society as well.

For instance, a member of the Mecklenburg Society in good standing can get a transfer card and move into any other county of the State, and he is a member in good standing there without any other ceremony than the presentation of his card. Instead of coming in among strangers, he comes in among members of his own society. On the other hand, if a physician was guilty of unprofessional conduct in our county, his record would follow him into any other county in the State and would be accepted as convincing evidence as to the character of the new comer, and thoughout the union a man's' standing at home would be the level of his reception abroad.

The adoption of the constitution proposed by the committee of the American Medical Association would mean very little change in the constitution which we already hold. The only change of any moment would be in regard to the fee bill. In taking up the constitution suggested in detail we find that the first article has to do with the name and title of the society, which is, of course, left blank except that it shall be a county society. The second article has to do with the purposes of the society, and is as follows:

"The purpose of this Society shall be to bring into one organiaztion the physicians of this county; and by frequent meetings and full and frank interchange of views, to secure such intelligent unity and harmony in every phase of their labor as will elevate and effectuate the opinions of the profession in all scien-

tific, legislative, public health, material and social affairs, to the end that it may receive that respect and support within its own ranks and from the community to which its honorable history and great achievements entitle it; and with other county societies to form the State Medical Association, and through it, with other State associations, to form and maintain the American Medical Association."

The third article makes every physician residing and practicing in the county and legally registered as such, and who is in good professional standing, eligible for membership. The fourth article says that regular meetings shall be held monthly or oftener, as the society may determine. The fifth article makes the officers the same as we have now, with the addition of regular delegates who are elected for a year. The sixth article is on funds and expenses. The seventh article concerns the charter which is to be obtained from the State Society. The eighth article provides for trustees and articles of incorporation when necessary. The ninth article is in regard to amendments, which may be made by a two-thirds vote, the proposed amendment having been read at two previous regular meetings.

The by-laws are divided into eight chapters. The first on Membership, second on Powers and Duties, third on Officers, fourth on Committees, the fifth on Funds and Expenses, sixth on Order of Business, seventh on Rules of Order, and the eighth on Amendments.

The principal change recommended so far as this society is concerned or any other society that has a fee bill and tries to enforce it, is found in Section 3, Chapter 2, of the By-Laws, and reads as follows:

"Agreements and schedules of fees shall not be made by nor in this society, but at least one meeting during each year shall be set apart for a full and frank discussion of the business affairs of the profession of the county, with the view of adopting the best methods of the most successful members as rules for the guidance of all. In all proper ways the public shall be taught that business methods and prompt collections are essential to the equipment of the modern physician and surgeon, and that it suffers even more than the profession where this is not recognized."'

Nothing is said about a delinquent list, but as all proper ways of learning the public to pay their bills are recommended, the delinquent list would come in as a proper way. A fee bill could be made for the guidance of the members, but no compulsion is to be used to make the members adhere to it. Insurance examinations being outside of the regular duties of the profession, are entirely ignored, and if any one wants to help out the poor, needy and dependent insurance companies by doing their work free, he is at perfect liberty to do so.

But after all, the best plan is to ignore this class of work entirely, and if a man has plenty of time, let him do this kind of work for nothing in order to get acquainted with people who at some future time might send for him to vaccinate the cook. So then the only radical change proposed by the committee is in reference to our fee bill and insurance examination rates, and as these men have made a careful study of the matter, it might be best to leave both these things outside the society. After all, the man who charges the largest fees is not for that reason alone the most professional man in the community, but rather the man who is honest with his patients, open and above board in all his dealings and kind and gener-

our to his brethren in the work; who loves medicine for humanity's sake, who esteems it a privilege to minister to the sick and afflicted in Christ's name, hoping for something here, but expecting infinitely more hereafter.

The question of reorganization will come up in the State Society at its next regular meeting in May, and this plan suggested by the American Medical Association will be voted on, and it would be a great help to the committee appointed by the State Society to consider the plan if the local society would express its opinion of the scheme, as the local society holds the key to the entire situation. Quite a number of State societies have already gone into the arrangement and have adopted the constitution as recommended.

But to make the plan a success, the State Society must have the hearty co-operation of all the local societies. The local societies are asked to adopt the constitution as it stands, but they are allowed to make such changes in the by-laws as may seem advisable for the particular locality. It does seem that the constitution is broad enough for all to stand upon, and we can change the by-laws to suit ourselves. For this reason there can be no excuse for not doing our little part in helping on this great work, which means so much to us and to our profession in the years to come.

New Use for Aluminum.

Owing to the property which aluminum possesses of producing a very high temperature when burned with substances that give off oxygen, it has lately been employed in Berlin for making a new detonator, for firing explosives which do not readily respond to the action of the detonating compositions hitherto used. The aluminum is used in the shape of a powder mixed with the other substances filling the percussion caps or detonators. The sudden high temperature induced by the pulverized aluminum results in a greater mechanical energy than can be produced with compositions not containing aluminum.

Volatile Oils in the Therapeutics of Burns.

Lucas - Championniere (*Nouveaux Remedies,* August 8th) says that essences, or volatile oils, are very efficient in the treatment of burns. He uses a mixture containing fifteen drops each of the volatile oils of geranium, vervain, thyme, and origanum, five grains of sodium naphtholate, and three ounces of white petrolatum.—*N. Y. Med. Jour.*

The regions in Germany in which cancer was found to be most prevalent, according to the recent collective inquiry, says the *Journal of the American Medical Association*, are being thoroughly investigated by the central committee. Additional circulars of inquiry have been sent to the physicians practicing there, and physicians are to be sent from the central office to study the conditions on the spot. Von Leyden, Kirchner, and Wutzdorf are at the head of the cancer research committee, and are striving to make it the nucleus for an international committee for the centralization of data on the subject of malignant neoplasms.

Be sure you are right—then sit down and think it over.

Selected Papers.

The Hand in Factory Surgery.*

By C. C. Godshaw, A. B., M. D

When we consider the power of wealth and the natural desire of corporations and manufacturers to increase their wordly gains and economize time by using the most improved machinery, oftimes of the most hazardous character, we can readily see how the mechanic, artisan, machinist, and the laboring classes in general, of both sexes, in their efforts to earn a living run the risks of injuries to the hand by virtue of its exposure. The hand is one of the most important members of the human body, and in proportion to its natural integrity is the power and capability of a man to fight the battle of life. We admire its beauty and symmetry, yet it can not be denied that man, whatever his vocation in life might be, is considerably handicapped if any portion of his hand be crippled. Therefore it is highly important in all injuries and wounds of the hand, whether caused by factory mishaps or otherwise, to always bear in mind two important factors—conservatism and utility. The hand is the organ of prehension and touch, and it should be the aim of the doctor, in all injuries involving the hand, to maintain its efficiency in both these respects, and especially where the fingers are injured to preserve as far as possible their flexion and extension.

Erichsen says: "The hand, from a surgical point of view, is composed of two constituents—the hand proper and the thumb. The thumb may be called the accessory hand, an opponent to the rest of the member, through the medium of which the movements of ab and adduction are chiefly performed, and without which the member is susceptible of comparatively little utility, being capable of little beyond the rest of the hand, and the preservation of its three bones is as much to be considered as that of the remaining sixteen that enter into the conformation of the metacarpus and fingers. In all cases of injury or disease implicating the thumb every effort ought to be made for its preservation. Even if it be left stiffened or incapable of flexion it will be a most useful opponent to the rest of the hand. Should it be found necessary to shorten it, care should be taken that as little curtailment as possible be practiced; a portion of the phalanx of its metacarpal bone even is of essential utility in giving strength and breadth of grasp to the hand."

So you can easily perceive the importance of endeavoring always to get the most useful and practical results when any portion of the hand of a factory employe has been injured, even at

*Read before the Kentucky Medical Society, May 7 9. 1902.

the expense of symmetry and beauty. This is a progressive age, and we can proudly say that the science and art of surgery have kept pace with the progress of the times, and by faithfully following strict aseptic methods most excellent results can be accomplished.

This paper was prepared particularly for the general practitioner, because most usually whenever a surgical emergency occurs the nearest doctor is hastily summoned, and it is advisable to be always ready with an emergency satchel containing a minor operating case, aseptic bandages, gauzes, absorbent cotton, needles, sutures, anesthetics, antiseptic tablets, and last, but not least in importance, Esmarch bandages, clean, soft brush, and some liquid soap. Always remember that the first attention is the best, and the first surgical dressing, if properly applied, is the most important, and should not be disturbed for at least eight days unless there be undue throbbing, unbearable pain, or indications of septic infection.

In all injuries of the hand, whether trivial or severe, as in any surgical operation, it is a safe rule to watch the pulse carefully and let the thermometer be your guide for subsequent treatment. We all know that it is by strictly following the lesson of asepticism that the brilliant results of the abdominal surgeon have been accomplished. Antiseptics, aseptics, and surgical aseptic technique are clinical facts, and the conscientious doctor of today is alive to these truths and carries them into practice.

When a student in the office of that distinguished surgeon, the late Prof. Richard O. Cowling, Professor of Surgery in the Medical Department of the University of Louisville, the invaluable lesson of absolute cleanliness in surgery was indelibly impressed upon my mind. With him cleanliness was a religious conviction, and was rigidly enforced, as was attested by his successful work.

The day is passed for carelessness, ignorance, and indifference in the treatment of wounds. Why draw the line of demarcation as to hand injuries of factory employes in machine shops, or railway employes, and the aseptic methods so carefully used in abdominal surgery and capital operations?

About twenty-five years past, when Dr. Cowling was surgeon of the Short-line Railroad, I had the honor to be his chief assistant, and treated and dressed many injured hands of the employes. He preached and practiced conservatism, and would say: "Godshaw, save everything you can; do patchwork and sacrifice beauty and form for usefulness." Since then I have been located in a factory district, and while I regret I have kept no accurate data, I am satisfied the bulk of the surgical emergencies I have seen was in the hand, involving the matacarpal portions and the fingers, and mostly the latter. The surgical treatment of all injuries involving the hand must of necessity depend upon the nature, extent, and severity of the injury sustained.

It would not be fair to take up the time of this Society to enter into a minute detail of the anatomy of the hand, so richly endowed with blood vessels and nerves, the functions of the many muscles, ligaments, and tendons, their origin and insertion as well as their relation to the phalanges, metacarpal and carpal bones. Suffice it to say, in addition to the practice of the strictest aseptics, to get the best results obtainable, whether it be a slight injury or the ungual extremity or a comple laceration and contusion of the whole hand, the doctor must know the

anatomy of the hand and be ready for every emergency.

I would not insult the intelligence of the members of this society by telling them how to treat shock and burns, to reduce dislocations and set fractures involving the hand, neither to describe the various methods and rules for amputations, nor tell you when and where such are necessary. It is rather my object to make a strong plea for asepsis and conservatism. "Amputate as a dernier resort," is a good rule to follow, and give nature a chance to show what she can do by saving all you can at the first dressing. Of course, good judgment and experience are very valuable, because every injury of the hand must, so to speak, be individualized, as we invariably find these injuries to differ in nature, extent, and severity.

When a surgeon intends to do a major operation the patient usually undergoes preparatory treatment, and the operator surrounded by the most aseptic conditions and aided by able trained assistants, naturally expects a speedy and good recovery. But in surgical emergencies of factory hands, or more especially injuries involving the hands of employes about railways, machine shops, woolen, planing, and saw mills, tobacco factories—in short, where frequently dirt, cinders, fifth, and grease become part and parcel of the injury received, it is indeed a marvel what brilliant results can nevertheless be obtained if we make these wounds as aseptic as we can and practice a thorough aseptic surgical technique.

As humanitarians ought we not to protest against child labor employed about dangerous machinery? Be it said to the honor and dignity of this grand old Commonwealth, the legislature at its last session put its foot down on the employment of child labor in factories.

It may seem that I am digressing somewhat, in one sense of the word, from my subject, yet I am justified in speaking of the hand as an individual, as he sometimes is known as the factory hand. Therefore, the relation of the factory hand or employe to his employer or surgeon in attendance is frequently worthy of attention and consideration. I further maintain that while we are expected to be true to "both the employer and the injured employe," yet is it not but fair and just that the latter shall practice the golden rule toward us? In this way not alone harmony and peace will prevail, but love and good will will reign supreme. And right here, from a medico-legal aspect, whether you dress the injured hand of a factory employe at the place of injury, your office, or it matters not where, have living witnesses for self-protection, that you will not be held responsible for the results of the injury. Sometimes amputation is absolutely required, or a badly crippled hand unavoidable. Though I have had no such experience, yet there are cases on record of deaths from septic infection and tetanus; therefore it is always safest to explain matters clearly to the injured party and interested parties. Most usually the city doctor has an assistant with him, and has this advantage over his country brother. Then again, when the injury to the hand is of a severe character, as a bad laceration and contusion of the soft parts entering the matacarpal and phalangeal articulations, complicated with fractures, then the movements of flexion and extension are frequently destroyed or very much imaired, because if the sheath of the tendon be in any way opened or injured

the tendon generally sloughs or becomes consolidated or matted to the sheath in such a manner as to become fixedly rigid, or there is very little movement.

Before concluding this paper, wherein I have tried to say *multum in parvo*, let me remind you of my article on "Surgical Emergencies from a Medico-Legal Standpoint," which is published in full in the transactions of the Kentucky State Medical Society held at Louisville, May 22-24, 1901. You will remember that I quoted in full the decision of the Court of Appeals against me for trying to collect my just dues from a certain factory for services rendered an injured employe at the request of the foreman. I desire to call the attention of the general practitioner and surgeon to the fact and precedent established by the wise Solons of the law, who have ruled in this case that a foreman of a corporation or factory is only recognized as a special agent employed for a specific purpose, and is not authorized by law to employ a surgeon in emergency cases and obligate his employer or the corporation for the services so rendered. In plain words, as my attorney told me, in the future if you have any doubt as to the honor and moral obligation of the factory or corporation, and you want to be legally secure for you bill, then get them to acknowledge their legal obligation to you in writing. You will pardon me if I ask you to read my criticism on the decision of the Court of Appeals in my article above referred to, because I believe it will be a financial lesson to you, if not an intellectual treat.

It is not my intention to report any cases, but shall now close this paper by summing up briefly the best and most rational method of handling and treating surgical emergencies to the hand of the factory employe.

1. Control the hemorrhage.

2. Remove all foreign bodies, as dirt and grease, by scrubbing with Synol soap and plenty of hot water.

3. Give nature a chance by doing patchwork.

4. Suture the nerves and tendons with sterilized catgut.

5. Use aseptic materials and dressings.

6. Avoid meddlesome surgery, and do not disturb first dressing if possible for one week. Watch the pulse and temperature.

7. Practice conservatism and utility.

8. Use some good dry antiseptic powder, as factories object to the odor of iodoform about the premises; or use odorless iodoform.

9. Amputate as a dernier resort.

10. Keep away from the courts, and give the shyster a wide birth.—*Amer. Pract. News.*

Common Nasal Conditions as the Cause of Neuralgias of the Terminal Branches of the Fifth Nerve.*

By Dr. Joseph Mullen, Houston, Texas.

The extensive prevalence of neuralgias of the terminal branches of the fifth nerve, and their seeming intractibility to general treatment, afford a sufficient excuse for presenting this interesting and important every-day subject. Neuralgias of these branches are the commonest of all conditions that we, as physicians, are called to treat. It is a complaint of all ages, sexes and conditions, and the one which is treated the most generally by the laity without regard to cause, duration or results.

*Read at Bryan, Texas, November 12, before the Brazos Valley Medical Association.

There is hardly a gentleman present but who can recall cases of chronic headaches, that have begun treatment by taking some proprietary preparation and finally ended by becoming a morphinomaniac—hence this attempt to simplify and differentiate the various common nasal causes of neuralgias of the fifth nerve from those due to the eyes, stomach, etc.

The location of the neuralgia may be in the eyeball, passing from the nose through the ophthalmic ganglion; in the supra or infra-orbital ridge coming as a direct nerve reflex from the nasal branch of the ophthalmic division of the fifth, or it may be left in the teeth of the upper jaw, through the superior maxillary division of the nerve. Again the seat of pain may be in the ear or temple, reflexly transmitted through the auricular and temporal branches. The seat of pain may also be found very severe in character over the orbital plate of the ethmoidal bone, or directly over the nasal bones. The frontal region may also be referred to as painful. This pain is probably dependent upon venous stasis or engorgement of the nasal plexus of veins.

The pain may vary from a feeling of uneasiness to that of the most excruciating, producing temporary loss of consciousness. It may be temporary in duration, remaining only a short time, clearing up with physical exercise, or it may remain for days without changing much in character or intensity, responding to no general treatment or medication, except morphine. Then again the patient may be awakened early in the morning, between 3 and 6 o'clock, with a headache lasting until the sun comes up strong, and exercise is indulged in, or a hot stimulating drink has been taken. The pain comes on again when the sun goes down, the air becoming damp, to disappear just before going to bed. In the morning the daily cycle begins a new. The pains, however, do not necessarily return every morning, but as a rule they do come as an early morning headache. An opposite recurrence of headache prevails in atropic rhinitis; the dampness of the atmosphere relieves the pain of this disease, felt on the bridge of the nose and in the eye, while the heated portion of the day intensifies or makes it worse. These pains also frequently follow in the wake of an acute rhinitis, at the stage when all the acute symptoms have passed away, and the thick catarrhal secretions have ceased; in other words, the turbinal membrane fails to return to the normal, when the swelling and engorgement increases, producing nasal pressure. I have known of many cases of pregnancy in which nasal reflex pains were present; where the pains began about the second month of pregnancy, and lasted until the sixth month, and then cleared up. All the cases had a previously existing hypertrophic rhinitis, and hence were very susceptible to acute cold in the head. The recurrence and production of reflex nasal headaches are not brought about by the use of the eyes, and rarely come on after 10 a. m. and before 5 p. m., unless the patient has an acute coryza, or the day is a cold or rainy one. While headaches from eye strain follow prolonged use of the eyes, and are relieved by sleep and a good night's rest, on the other hand nasal headaches come on early in the morning after a night's rest, and disappear as the day becomes warmer, or it is frequently relieved by physical exercise, more so than eye headaches. Nasal headaches are also made better by eating a hearty meal or drinking alcoholic stimulants. The commonest of all nasal

causes of neuralgias of the terminal filaments of the fifth nerve, is nasal pressure induced by the commonest of all nasal conditions, hypertrophic rhinitis. This condition is prevalent everywhere and at all seasons of the year, and is the direct outcome of frequent and untreated attacks of coryza. It does not follow, however, that all cases of hypertrophic rhinitis have reflex neuralgias of the fifth nerve. A large proportion of patients show a transient attack of mild pain after an acute coryza has just cleared up. In other cases the pain continues increasing in severity and duration, the membrane seeming not to have the recuperative powers to return to its previous condition. The most common place in the nasal cavities for pressure of this character is first on the middle turbinals, and secondly in the anterior horn of the superior turbinal bone. Nasal spurs are also a frequent cause of nasal pressure, usually involving the nasal process of the vomer. As in the case of hppertrophic rhinitis, there are many cases of septic spurs, which do not produce nasal pressure. I recall a trained nurse whose left eye had been pronounced glaucomatous; the pain in the eye had become so intense that she was unconscious, intra-ocular pressure was plus 2; the pupil, however, was markedly contracted, the pericorneal injection was quite apparent. On examination of the left nasal cavity, it showed pressure of the hypertrophic membrane upon a small nasal spur—this was retracted with cocaine solution and small pledget of cotton interposed with iodine, and in a few moments she was conscious. Nasal pressure does produce conditions other than local pains along the course of the fifth nerve. Epilepsy, chorea, and a number of other diseases may be dependent upon it.

Nasal polypi also frequently produce these headaches; when they do, however, dampness and rain always increase the pains. They are more or less constantly present, but improve somewhat during dry weather.

Diseases of the accessory nasal chambers, such as the frontal, ethmoidal, maxillary and sphenoidal sinuses, are found to frequently cause these headaches. The presence of sinus disease is more easily detected now than formerly, especially since Hajek, of Vienna, has investigated the subject so fully. At times it is quite difficult to detect these conditions, and then only after repeated and careful examination of the most exhaustive character. It is needless to say in the treatment of all the causes of neuralgias of the fifth nerve enumerated that the important consideration is to make a correct and accurate diagnosis, and finally to remove the cause, be it nasal pressure induced by hypertrophic rhinitis, simple nasal engorgement, nasal spurs, or sinus disease.—*Texas Medical Journal.*

Phlyctenular Inflammation of the Cornea.*

By M. F. Coomes, A. M., M. D., Professor of Physiology, Ophthalmology, Otology and Laryngology in the Kentucky School of Medicine; a Member of the American Medical Association, the Kentucky State Medical Society, and the Louisville Clinical Society; Ophthalmic Surgeon to Louisville City Hospital and the Kentucky School of Medicine Hospital; Consulting Ophthalmic Surgeon to Sts. Mary and Elizabeth Hospital; Ophthalmic Surgeon St. Anthony's Hospital, etc.

This disease is confined almost exclusively to children from two to fifteen years of age; sometimes it is met with in adults.

Causes.—The older practitioners in ophthalmology were inclined to believe

*Read before the Brashear Medical Society, at Taylorsville, Ky., July 15, 1902.

that it was a blood discrasia, and they were not far from being correct. A micro-organism resembling the cocus flavus desidens has been found in connection with phlyctenular inflammation of the cornea, but while this is true I am of the opinion that the subject of this disease is always in a state of physical depravity when the disease manifests itself, therefore the soil must be in a proper condition before the germs develop and bring about the characteristic manifestations.

Symptoms.—Congestion of the conjunctiva, either general or in localized areas, is always one of the conditions present in this disease; in fact, this is the last of the symptoms to disappear. The redness of the covering of the eyeball in many cases is very mild, while in the aggravated cases the congestion is violent, and along with this active congestion there is always photophobia (intolerance of light) and excessive lachrymation. In many of the typical cases the child, if it be only a few years old, will bury its head in the pillow at daylight and keep it there until twilight unless removed by force. This picture, no doubt, is familiar to most of you. In such cases the ulceration of the cornea is usually deep or near the center, or a large area of ulceration or a number of small ulcers will be found to exist in most cases of this kind. The depth of the ulceration and the surface area of tissue involved will always govern the severity of the symptoms; that is, the more tissue involved the more severe the symptoms. There is frequently an eczametous condition about the nose and face, which at times is extremely annoying to both patient and doctor, but which should be treated as an ordinary eczema.

Prognosis.—The prognosis of the disease will depend altogether on the violence of the attack and the amount of corneal tissue involved, and the manner in which the case is handled. With proper care and prompt, active treatment the most of these cases recover with good vision.

Treatment.—This is necessarily local and constitutional. The local treatment should be directed to the relief of pain and the arrest of the progress of the disease; that is, of the destructive ulcerative processes that sometimes occur in connection with these cases. To determine the condition of the ulcer, cocaine the eye with a 4 per cent. soltuion of cocaine and then drop a soltution of methyl blue, five grains to the ounce of water, into the eye, when that portion of the corneal surface that is open will be stained a deep blue with the methyl.

The presence and size of the ulcer having been obtained by the staining, the next thing to be done is to touch the ulcer with pure liquid carbolic acid. This is best done by taking an ordinary dressing probe and dipping the rounded end of it into the carbolic acid and then shake what can be shaken from the probe and finally touch the surface of the ulcer, which should become whitened by the acid. Then some bland oil, as albolene oil, should be dropped into the eye to insure against the excess of acid doing harm. It is very important to stain these ulcers each day, so as to note their progess. If the area of blue is decidedly lessened, then further use of the carbolic applications will not be necessary; but if there is no reduction in the stained area, or an increase in its size, then another application, and so until the healing process begins. Usually it is not necessary to make more than one, or at most two, applications of the acid.

Atropine is recommended by nearly all authorities, but for what reason I am

not prepared to say. It dilates the pupil and lets in an execessive amount of light upon an already highly sensitive retina. A solution of the sulphate of eserine, one grain to an ounce of water, dropped into the eyes every six hours is quite sufficient to maintain a very close pupil and thus cut out the light and stimulate the circulation in the sluggish vessels in the neighborhood of the ulcer, which is an all-important matter in such cases. In extreme cases a 4 per cent. solution of cocaine may be used once in twenty-four hours. This, however, should only be done for the purpose of examining the eye. Nurses and mothers should be warned of the great danger of cocaine solutions, as the continued influence of the drug will destroy the cornea in a few hours. I have recently witnessed the loss of an eye by the patient disobeying directions in regard to the use of cocaine. Where the cases are prolonged it is wise to dilate the pupil every four or five days to insure the freedom of the iris, as iritis might develop in connection with a case of phlyctenular keratitis. Atropine solution two grains to an ounce of water should be used.

Where the photophobia is intense it is often relieved by wrapping the child in a sheet or large towel, so as to secure the hands and feet, and then dip the face suddenly into a bowl of cold water. Of course it produces a very decided reflex action, and in many cases the child will open its eyes in a few minutes and they will remain open for quite a while afterward. Where they are inclined to keep the eyes closed it is a good plan to do this every morning, so as to relieve pressure and give the eyes a chance to cool off, and to let the air into them. The best of diet and tonics should be given in all these cases.—*The Amer. Pract. and News.*

The Tonsils.

In health the tonsils are small and of the same color as the healthy lining of the mouth. They do not take up much room in the throat, and do not interfere with the passage of food. Should they be unduly large, or of a darker color, or covered with whitish, yellowish, grayish or greenish patches, or studded with minute white or yellowish dots, there is some trouble with the child's throat that requires the immediate attention of the physician. The same is true in case the arch of the palate or the little tongue be swollen, red, or show any white, yellowish, grayish, or greenish patches, or if the wall of the gullet, instead of hanging perpectly flat, appears to bulge forward, pushing the arch of the palate in front of it.—*Pediatrisc.*

All that emphasizes the work of our profession adds dignity to every individual worker, however obscure. Discussing the "Doctor in Cartoon," the Philadelphia *Medical Journal* says recently:

"*Vanity Fair,* an alleged humorous journal of Great Britain, has been caricaturing some of the eminent medical men of London. We are not certain that we are called on to sympathize with our confreres. No man is famous until he is cartooned, and per contra, no man is cartooned until he is famous. There may be a little comfort for our British colleagues in the thought that they are eminent enough to be fair game for the caricaturists. In a certain sense this may be the next best thing to being a baronet."—*Med. Mirror.*

Full many a mortal, young and old,
Has gone to his sarcophagus,
Thro' pouring water icy cold
Adown his warm œsophagus.

NATURE AND SCIENCE.

Aerial London.

The Rev. John M. Bason, who for several years, with the aid of a balloon, has industriously explored the atmosphere over London, gives a strange picture of the skyward extension of the world's greatest city. Somewhat fancifully, and yet with a certain degree of truth, London might be said to be 6,000 feet high or deep, for up to about that level the air over the vast town is unmistakably London air. Between 3,000 and 5,000 feet above the housetops is a region where dust resembling chaff, filaments and woolen fibre, such as would arise from thoroughfares and from the sweeping of houses, seems especially to accumulate. At least there is more than nearer the ground. In calm weather aerial London becomes to a certain extent stratified. From above 6,000 feet one can often look down upon the surface of the haze, as if it had a definite limit.

"The Biography of a Snowflake."

Under this title Mr. Arthur H. Bell, in *Knowledge*, describes the life history of the aerial frost flowers of winter. In order to have a fair start in life a snowflake should be built up on a particle of dust. Then, if it has the good fortune to begin its career at the top of a cloud many miles above the earth, and to pass through many atmospheric strata, differing in their temperature and the amount of moisture they contain, our snowflake is very likely to become a notable individual among its kind. In a stratum of warmer air the little flake catches moisture on its tiny spicules, and when it enters a colder stratum below, the moisture is frozen, and so the flake grows. In a thawing air many flakes sometimes cohere, forming disks from an inch to two or three inches across.

The Study of Man in Asia.

Prof. G. Frederick Wright, who recently made a trip across Asia for scientific study, says one of the surprises of Siberia is its abundance of public museums in which special attention is devoted to anthropology. Since Asia has been regarded by many as the original cradle of mankind, this preference for anthropological study is particularly interesting. Prof. Wright mentions a dozen cities of Asiatic Russia, including Vladivostok, Irkutsk, Minusinsk, Tomask, Tashkend and Tiflis, which contain excellent museums, and he says there is scarcely a town of 10,000 inhabitants in all Siberia which is not thus provided with an educational factor, bearing particularly on the study of the human race, which may well provoke our emulation.

Hidden Wealth of the Amazon.

An indication of the extent of the unexplored riches contained in the great forests bordering the world's mightiest river, the Amazon, is given by the statement that there is practically no limit to the supply of guttapercha to be obtained there from the balata tree, although until very recently the Brazilians did not know the gum-

producing qualities of the balata, and cut down the trees freely for firewood and building material. The balata grows in great abundance near Para and along the Amazon and its tributaries for thousands of miles. Greater expertness is needed in bleeding the trees than in the case of those that produce india-rubber, but the trees yield more sap than do the rubber trees.

Hudson River Mastodons.

The remains of another mastodon were found recently by laborers digging muck and marl from a small swamp near Newburg, Orange county, New York. This part of the Hudson River Valley, on the west shore, just north of the Highlands, appears to have been a favorable habitat of those gigantic animals, for three skeletons of mastodons have been unearthed in former years from the swamps of Orange county. The latest find differs from the others in that the bones, instead of lying close together at the spot where the monster had become enmired, were found scattered over about 1,000 square feet, at depths varying from two to eight feet.

No Open Polar Sea.

Both Peary and Baldwin, who recently returned with their expeditions from the arctic regions, have remarked to interviewers that, in their opinion, there is no open polar sea. It seems certain that the north pole of the earth is situated in the midst of an ocean, which, although not eternally frozen, is practically always covered with ice. Neither of these explorers thinks it an impossibility that the pole should be reached. Peary believes it can be reached on sledges by any adequately equipped expedition starting from winter quarters in 83 degrees north latitude.

Why Earthquakes Can Be Predicted.

Dr. Cancani, after a careful study of Italian earthquakes, finds that all such disturbances strong enough to damage buildings, even to a slight extent, are invariably preceded as well as followed by minor shocks. In other words, an earthquake is not an isolated phenomenon, but is one of a series of disturbances. When the depth of the focus of disturbance is small the tremors last about ten days, when of moderate depth about three months, and when of great depth possibly several years. Prof. Omori in Japan has arrived at similar conclusions about minor shocks connected with strong earthquakes.

The Center of Speech.

Prof. D. J. Cunningham, of Dublin, in a recent lecture, described the inherited nature of a right-handedness in man. He also made some very interesting statements about the location, in the brain, of the center of speech. In all right-handed persons this centre is on the left side of the brain. But in left-handed persons the speech center is shifted to the other side, so that, as Prof. Cunningham says, "The left-handed speak from the right brain."

A Vanishing People.

Mr. Peary says that the tribe of Eskimos living on the shore of Whale Sound, in Greenland, are the most northerly people in the world. Their isolation has differentiated them from all other races. They do not exceel 200 in number, and are being destroyed by an unknown disease which appears to be a slow malignant fever. Lieutenant Peary became personally known to every man, woman and child belonging to this remote and perishing community of human beings.

The Presentation

of the following

VALUABLE FORMULAS

is of interest to every Physician.

PIL. DIGESTIVA

(WARNER)

℞ Pepsin Conc t, 1 gr.
Pv Nuc Vom. ¼ gr.
Gingerine. 1-16 gr.
Sulphur, ⅛ gr.

VERY EFFECTUAL IN INDIGESTION.

SPECIFY WARNER & CO.

PIL. ARTHROSIA

(WARNER)

℞ Ac. Salicylic.
Ext. Colchicum.
Ext. Phytolacca.
Podophyllin.
Quinine.
Pv. Capsicum.

ANTILITHIC, TONIC, ALTERATIVE. VALUABLE IN THE TREATMENT OF

RHEUMATISM AND GOUT.

PIL. PERISTALTIC

(WARNER)

℞ Aloin, ¼ gr.
Ext. Bellad. ⅛ gr.
Strychnin. 1-60 gr.
Ipecac, 1-16 gr.

MILD, THOUGH EXCEEDINGLY EFFECTIVE IN

CONSTIPATION AND BILIARY DISORDERS.

INGLUVIN

FROM THE LINING MEMBRANE OF THE GIZZARD OF CHICKEN

A Specific in Stomach Troubles and excellent as an adjunct to Calomel administration; it prevents nausea.

SAMPLES AND LITERATURE ON REQUEST.

WM. R. WARNER & CO.

PHARMACEUTICAL SPECIALISTS

PHILADELPHIA NEW YORK CHICAGO NEW ORLEANS

THERAPEUTIC HINTS.

Treatment of Pneumonia.

In cases of uncomplicated pneumonia recovery may occur without any treatment whatever, yet it is necessary to place the patient under the most favorable hygienic surroundings. Concerning diet, a quart of milk or broth taken every twenty-four hours is amply sufficient, but he may be allowed a small quantity of fruit, and liberal amounts of water as thirst demands.

Elimination should be promoted as rapidly as possible by means of cathartics, diuretics and diaphoretics.

A thick cotton jacket should be applied to the whole trunk, maintaining it firmly in place and covering it with oiled silk. This should remain on during the entire course of the diease save when an occasional examination of the chest is imperative.

The vascular excitement and congestion of the first stage may be allayed by the following:

R Tinc. aconiti .....m. viii
Spiritus etheris nitrosi.....dr. v
Tinct. opii camp.....dr. iii
Liq. ammon acetatis, q.s., ad oz. iv

M. Sig. Dessertspoonful in water every hour.

The pleuritic pain attending pneumonia is so distressing at times that it may be necessary to resort to opiates, preferably morphin and atropin or coniin hydrobromate 1-12 to ½ grain hypodermically. Should insomnia, delirium and marked nervous symptoms manifest themselves, trional, paraldehyde, or hyoscin may be given.

Should the temperature be persistently high—104 or 105—hydropathy is indicated. It matters little how the cold water be applied, only let it be applied—either by sponging, cold applications, rubbing with ice, or ice coil.

Medicinal antipyretics, as such, are to be disparaged, though, of course, they may be used as a specific in complicated conditions—as, for example, quinin in complicated malaria, or salicylates in rheumatism, but even here with caution.

One of the chief indications, however, in the treatment of puenmonia is to support the heart, which, if inclined to be feeble, with low arterial tension, is best done by digitalis given in full doses. Strychnin, however, is more uniformly valuable, and to obtain the best results it should be given with a free hand, especially in very severe cases, preferably by hypodermic injection.

No specific dose can be prescribed, but the administration should be pushed to the extreme limit of safety. The dose of strychnin, however, must be regulated by the action of the heart. Doses varying from 1-32 grain three or four times a day to 1-15 grain every two hours have been given. We believe that alcohol is an unsafe drug in this disease, save in great emergencies that call for the use of a powerful diffusible stimulant, to compel the heart to increase action in order to tide the patient over a critical period. For this purpose the following is useful:

R Spiritus frumenti.....dr. iv-oz. i
Spiritus ammon, aromat .....dr. i
Spiritus camphoræ .....m. xv
Spiritus etheris comp.....m. xv

M. Sig. Give at one dose in water, and repeat in thirty minutes if necessary.

In desperate cases, when the patient

The Great Problem

In the successful treatment of consumption, scrofula and wasting diseases generally, the great problem is **how to add fat to the diet in a form that will be assimilable** without overtaxing the digestive organs. It is not what one eats, but what one assimilates that supplies food to the fat-starved tissues.

The positive solution of this problem is found in Hydroleine, a perfect emulsion of cod-liver oil prepared in strict conformity with the true principle of the digestion of fats.

Hydroleine supplies the **maximum quantity of oil with the minimum amount of tax upon the digestive organs.** It is readily retained by the weakest stomach and is entirely absorbed. As a producer of weight and strength it has no equal. Samples free to physicians.

Sold by druggists generally.

THE CHARLES N. CRITTENTON CO.

(Sole Agents for the United States)

115-117 FULTON STREET, NEW YORK

When writing advertisers please mention this Journal.

is cyanotic and struggling for breath, the inhalation of oxygen is invaluable.

For cough, drugs are indicated which serve to lessen the viscidity of the expectoration—such as the ammonium preparation, preferably the carbonate—and as a sedative expectorant, cannabis indica may be employed in preference to opium.

Prescriptions like the following, or modifications of them, may be used advantageously:

℞ Ammonii carbonatis ....dr i
Ext. cannabis indicæ fluidi..m. xlv
Syrupi senegæ ....dr iv
Syrupi glycyrrhizæ, s.q , ad ..oz. ii

M. Sig. Teaspoonful every two or three hours.

℞ Ammonii chloridi .....dr. i
Spiritus etheris nitrosi.....dr ii
Syrupi ipecacuanhæ .. ..dr. iv
Liq. ammon acetatis ..... oz. ii
Sprupi pruni virg., q.s., ad.. oz. iv

M Sig. Dessertspoonful in water every two hours.—*Jour. Amer. Med. Association.*

Subconjunctival Injections in Diseases of the Eye.

By E. E. Gibbons, M. D., Baltimore.

The value of subconjunctival injection in the treatment of certain affections of the eyeball is an established fact. Such treatment is not as widely employed as it should be. It is of especial value in keratitis, both in the interstitial and suppurative forms, and in uvetis. Inflammation of the optic nerve and retina are less favorably benefited. Various solutions have from time to time been employed, and act, by stimulating the lymphatics, to absorb the products of inflammation. At the same time the toxins present are diluted, and thus rendered less hurtful. It makes little difference whether we employ normal salt solution or a weak solution of bichloride of mercury (1-8000), or what not, save in specific inflammation, when a solution of potassium iodide and iodine seems of greater efficacy. The solution is introduced into the lymph space of tenon, and from there it makes its way into the perichoroidal lymph space through the communicating channels, around the venae vorticosae. Thus the solution is brought in direct contact with the diseased area. Four to six minums of the solution are introduced beneath the conjunctiva of the eyeball above the cornea. The eyeball is cocainized, the upper lid elevated with the finger, and the needle of a hypodermic syringe is pushed well beneath the conjunctiva, about one centimeter from the limbus, and the fluid injected. Considerable swelling is the result, but little pain is produced. The feeling of tension in the eye is more alarming to the patient than the amount of pain. The eye is then bandaged for several hours. It is better not to elevate the conjunctiva with a pair of forceps in introducing the needle, as one is apt to prick the conjunctiva and make a way for escape of the fluid. The solution usually employed by the writer is the following:

Potassium iodide ..... gr. 15
Iodine ....gr. ½
Water .....oz. i.

In syphilis we often push internal treatment to the point of salivation, or succeed in upsetting our patient's stomach without affecting to any considerable extent the ocular inflammation. By introducing the medicine beneath the conjunctiva we bring it into intimate contact with the diseased area and thus get the greatest effect from the least amount of medicament. The operation is free from danger if antiseptic precautions are taken. The writer has employed this treatment in a number of cases during the past two years, and has failed to find any case which it has

not benefited, more or less. It has given the least results in cases of detached retinas, for which it has been recently recommended. The good effect of the injection is often apparent in 24 to 48 hours. Injections are usually made every other day. The following will serve as an illustrative case: Several weeks ago a negro girl presented herself with a gumatous iritis. She had a plastic exudate of considerable extent in the anterior chamber. The cornea was so hazy that the pupil could scarcely be discerned through it. The sight was reduced to large objects at close range, and the eye had a very angry look. The patient had been under energetic antisyphilitic treatment for some time, and she had recently recovered from a plastic iritis. The eye continued to grow worse, despite any effort to combat the inflammation, so subconjunctival injections were begun. After the second injection there occurred a marked improvement, and after the third injection the deposit and gumma of the iris had disappeared, and the cornea rapidly regained its normal appearance. While the right eye was being treated, the left eye developed a choriditis, so injections were made in that also, with a marked subsidence of the inflammation and clearing of the vitreous, to the extent of vision being improved from large objects to 20-50 in the course of a week. The case is still under care and improving. From the rapidity with which this case grew better, it is evident that the injections were the cause of it, as such marked improvement is not usually noted, from other methods of treatment. Many parallel cases could be cited, but to no end, save to enhance the value of this method of treatment.—*Jour. Eye, Ear and Throat Diseases.*

Whooping-Cough Croup

A method which immediately palliates the attendant paroxysms, inhibits injurious sequelæ, and, with attention to a strengthening diet, brings the case to an early termination, with a minimum of internal medication, is worthy of trial.

Vaporized Cresolene has been used successfully for spasmodic coughs for more than twenty years.

Literature on request.

Vapo-Cresolene Co.
180 Fulton St., New York.

Keeley Cure
For Drunkenness and Drug Using.
Please write us. Correspondence confidential.
Our Illustrated Handbook Sent Free On Request.
THE KEELEY INSTITUTE, Dept. B., Greensboro, N.C.

NEURILLA
NERVE CALMATIVE
NERVE HEALTH
follows its use.
Dose: Teaspoonful every half hour until nervousness is abated, then four times a day.
Teething Children 10 to 20 drops.
DAD CHEMICAL COMPANY, NEW YORK.

Review of Medical and Surgical Progress.

Some Vaccinal Eruptions.

Stetwagon, in *Jour. Am. Med. Ass.*, in discussing vaccinal eruptions, adopts two general divisions. First, eruptions due to pure vaccine inoculation, and second, eruptions due to mixed inoculation. The most frequent and harmless are the localized or general erythema, urticaria, erythema mulleforme, a regional vaccinia, impetigo contagiosa and a peudo-erysypelatous or localized true erysypelatous inflammation. Impetigo contagiosa may appear at any time after vaccination, but occurs as a rule during the first week and may be only around vaccinal area or may be more extensive. Bullous and pemphigoid development may intermingle with impetigo and this condition may be mistaken for general vaccina. Erythema and urticaria may arise any day and frequently occur together. This urticaria is of longer duration than usually shown, often vesicular capping and often have development of bullae which in some cases becomes predominant and very large. This large type is generally of long duration in relapsing periods. Eruption in which pemphigus predominates, may present acute form and which is sometimes fatal or may be chronic, developing and last from three to twelve months. In view of the fact that nonvaccinal acute pemphigus occurs most frequently with butchers of milkers, it is possibly that this may throw some light on eteology of these cases and is a field which should be investigated. Eczema, the author thinks, more frequently coincident and is observed in children under 5 years. Psoriasis rarely begins at vaccination point and becomes general. Parenthetically it is remarked that vaccination neither aggravates nor mollifies the more common skin diseases. Arising from careless operation and impure virus, a few cases of tuberculosis lupus have been reported. Another cites lupus cases in child vaccinated by crust. Syphilitic developments are now rarely seen owing to better quality of virus. In cases of gross carelessness on the part of operator or which is more frequently the case where the vaccinated subject by lack of cleanliness allows infection or in cases where the eruptions are merely coincidental, we have the eteology of most vaccinal skin complications. It is not just for the laity to attribute all skin eruptions to vaccination nor should physicians maintain that no skin eruption arises therefrom.

Venereal Prophylaxis That is Feasible.

Dr. Ludwig Weiss, of New York, who was secretary of the Committee of Seven, appointed last year by the Medical Society of the county of New York for the study of venereal morbidity, in his paper read in the Section in Cutaneous Medicine and Surgery of the Amer-

EVERYBODY'S MAGAZINE

will be more fully than ever in 1903 the distinctively bright, virile and wholesome periodical of America. It will be always vitally interesting. It will take hold on human experience with a firm grip. It will show that a magazine may be thrilling without being sensational. *Everybody's* presents strenuous and clean life in every phase, through fact and fiction. It is now, and will be increasingly,

A MAGAZINE OF LIFE.

A mere hint of part of the year's programme is given below:

TRUE STORIES OF IMPORTANT EVENTS. There is always an "inside" to a notable occurrence; and it is almost invariably a story of intense human interest.

The True Story of the Organization of the Steel Trust.

The True Story of How Theodore Roosevelt Became President.

The True Story of the First Railroad Merger.

SIGNIFICANT AUTOBIOGRAPHIES:

The Autobiography of an Insurance Agent, who must know human nature intimately.

The Autobiography of a Bank Cashier, who uses keen insight into the ways of borrowers.

The Autobiography of a Naval Officer, who regards civil life as a lower order of existence.

The Autobiography of a Member of Congress, who reveals many things that are seldom told.

THE BLOWING OF AN OIL BUBBLE. By S. MacREYNOLDS. Exposing the methods of promotion "sharks," who victimize the public with stock in visionary oil wells.

STORIES OF STRENUOUS LIVES. The true stories of men whose personal feats outdo the exploits of heroes of romance.

THE BOHEMIAN MUSICIAN By JAN KUBELIK. The brilliant young violin virtuoso tells the story of his own career.

WORK WITH THE HANDS. By BOOKER T. WASHINGTON, of Tuskegee Institute. This is the most important message of the author to his generation.

STORIES OF WESTERN RIVER LIFE. Mr. G. W. Ogden's stories of life and adventure in the great river steamers which half a century ago plied the Mississippi, the Missouri and the Ohio make a picture of an intensely interesting phase of our national development.

NATURE STUDIES. By Prof. J. M. COULTER, of the University of Chicago; A. R. DUGMORE, H. C. MERWIN and others. Being intimate observations of nature from the scientific, pictorial and nature-loving point of view.

POPE LEO XIII. By F. MARION CRAWFORD, the well-known novelist who is the official biographer of the Pope, and has unusual opportunities for acquiring a knowledge of his career.

NEW YORK THE MOST INTERESTING PLACE IN THE WORLD A series of illustrated articles explaining the great forces at work which destine New York to be the coming capital of the world.

DRAMATIC EVENTS IN AMERICAN HISTORY. Many of the hill-top events of the greatest emotional and historic interest vividly told by some of the best writers of the day, and profusely illustrated.

The Webster-Hayne Debate.

Critical Days in Great Careers.

The Fall of Richmond.

WOMEN'S SPORTS. By Miss ANNA WHELAN BETTS.

FICTION. *Everybody's Magazine* has secured for the coming year stories by some of the brightest, most original writers of the present day, prominent among whom are the following: MARY E. WILKINS, HOLMAN F. DAY, JUSTUS MILES FORMAN, WILLIAM BULFIN, SYDNEY PORTER, W. R. LIGHTON, and many other old favorites as well as many new writers who are rapidly forging to the front in the field of literature. Among the stories that will appear during the year are: "The Way of the Wind," by the author of "A Modern Antæus;" "Vashti," by G. M. Baxter; "An Unconvicted Convict," by E. C. McCants; "The Rapier of Ferarra, by Atherton Brownell; "The Place of Dragons," by Elia W. Peatie; "The Captain," by Maxamilian Foster; "The Wheel of the Potter," by Herman Whitaker; and "The Needle of the Damned," by Justus Miles Forman.

ONE DOLLAR PER YEAR. TEN CENTS A NUMBER.

JOHN WANAMAKER, Publisher.

See Club Offers on Next Page.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

ican Association, at Saratoga, presented the vast topic from different views. Prostitution being the main source for the spread of venereal diseases, measures against it should constitute the first steps of prophylaxis. As, however, regulation as practised in Europe, could not be considered here on account of constitutional and racial objections, a tacit toleration as long as public propriety was not insulted should be exercised as the lesser evil. On the other hand, social, economic, educative, and legislative measures should be instituted, forming a moral control of vice. Such were creation of better factory laws, living wages, division of sexes in workshops, working women's coercive accident and sick benefit insurance societies, mutual loan associations, asylum for women out of work, education with tact and discretion in sexual matters of the young of both sexes by teachers of the same sexes, broader instruction of medical students in venereology, and education of the public and of the patients. In the present moral evolution of the race, moral measures alone would be slow of producing quick and tangible results, therefore sanitary measures were of paramount value. The moralist anticipated the redemption of the race; the sanitarian dealt with things feasible. Therefore we must have more adequate hospital and dispensary facilities, to save the innocents. Not one in two thousand of those affected with venereal diseases could get hospital treatment. Individual prophylaxis by instillations *post coitum* of a 20 per cent. Protargol-glycerin solution, as recommended by Neisser, Kopp, Nissl, and other continental authorities, was the most feasible means against the enormous spread of venereal diseases and should be recommended by physicians as yielding excellent results.—*New York Medical Journal.*

Aspirin in Diseases of the Eye.

Dr. Hans Girchner (*Die Ophthalmolog. Klinik.*, No. 18, 1901) has used this product with happiest results in acute iritis. Cases which failed to yield to the salicylate of soda and salol were markedly benefitted by the administration of Aspirin. The value of Aspirin was not only seen in inflammations of rheumatic origin, but in iridocyclitis from a variety of causes. The pain in this class of cases seems to vanish as if by magic under the influence of Aspirin. Cases of scleritis and abducens paralysis were apparently influenced.

The author reports a case of iritis serosa where the pain disappeared and the exudates were absorbed under the administration of Aspirin. Supraorbital neuralgia was promptly relieved, particularly the very acute cases. Headaches of obscure origin were dissipated by Aspirin, so also headaches where the cause was known, but which had failed to yield to the usual remedies. Generally speaking, fifteen grains were employed at a dose, and this dose was sufficient to relieve the trouble. More than thirty grains were never necessary. —*Annals of Ophthalmolgy.*

A Plastic Substitute for Circumcision.

Dr. S. F. Long (*Pacific Medical Journal*, October) in a paper recently read before the San Francisco Clinical Society, described a new operation for circumcision, which consists essentially in excising a cone-shaped piece of the skin, with its base at the pubes, from the dorsal surface of the penis, when by drawing back the upper curved margin of the incision and stitching it to the basal edge, the foreskin is retracted

OUR CLUBBING OFFERS.

By special arrangements we are enabled to offer you a number of splendid combinations of yearly subscriptions. The subscriptions may be new or renewal (unless otherwise specified), and may be ordered sent to one or to different addresses.

Publications from Which You May Select.

Class A.	Regular Price.
Woman's Home Companion	$1 00
Cosmopolitan	1.00
Arena	2.50
Good Housekeeping	1 00
American Boy	1 00
Mind	2 00
Pilgrim	1.00
What to Eat	1.00
Table Talk	1.00
Recreation	1.00

Class C.	Regular Price.
Little Folks—new	$1.00
Ladies' World	.40
Motherhood	1.00
Criterion	1.00
The Camera	1.00
American Messenger	.50
Book News	.50

We Offer the Following Clubbing Rates for 1903.

The Carolina Medical Journal, Everybody's Magazine, and any one periodical in Class C $2.00

The Carolina Medical Journal, Everybody's Magazine, and any two periodicals in Class C 2.25

The Carolina Medical Journal, Everybody's Magazine, and any one periodical in Class A 2.25

The Carolina Medical Journal, Everybody's Magazine, and any two periodicals in Class A 2.75

The Carolina Medical Journal, Everybody's Magazine, and any one of Class A and any one of Class C 2.50

A Special Offer—$7.50 for $3.50.

For only $3.50 we can accept your order for a club consisting of the Carolina Medical Journal, Everybody's Magazine, Public Opinion (new), and any *one* of Class A or Class C.

Take Note.—The regular price of Public Opinion alone is $3.00, and it is a splendid weekly magazine which will be appreciated by every American family. Note the bargain we are enabled to offer:

Public Opinion—new sub	$3.00
Arena (Woman's Home Companion)	2.50
Everybody's Magazine	1.00
The Carolina Medical Journal	1.00

$7 50 WORTH. SEND $3.50 AND YOU GET ALL FOR ONE YEAR.

THE CAROLINA MEDICAL JOURNAL.

Charlotte, North Carolina.

When writing Advertisers please mention this Journal.

from the glans. The operation is as follows:

The covering of the penis being in the form of a cone-shaped tube, with its apex inverted, forming the inner or mucous lining covering the glans, and attaching itself back to the corona, it becomes necessary simply to shorten the tube in order properly to uncover the glans. This is easily accomplished by making the reduction at the base instead of the apex, as under the old method. The section of skin to be removed is in the form of a triangle with each of its points rounded.

The operation may be done under local or general anaesthesia, a one per cent. solution of cocaine answers admirably, carefully injected in small quantities about the site of the operation. I prefer to have the hair clipped off quite short with scissors, and shave only the site of the operation, as the patient is more comfortable during the reproduction of the hair. The parts should be thoroughly washed and rendered as asceptic as possible. The cocaine is now injected, and the patient soon ready for the operation.

The operator should carefully measure by drawing the skin back and ascertaining exactly how much shortening is necessary. If we remember that the foreskin is double we shall find it will greatly aid us in estimating the exact distance. For example, if the foreskin is one inch in length from the corona glandis to the end, then we should denude two inches from the base along the dorsum to the point of measurement, to account for the mucous membrane which is also an inch in length. Having ascertained the amount to be removed and marked the points on the dorsum and on each side at the base by clipping them with small forceps, we proceed with a sharp scalpel to outline the section to be removed. Beginning at the juncture of the organ with the pubes and extending around either side about two-thirds the circumference, passing around the first marking forceps and including it in the piece to be removed, with a neat curve we proceed in a direct line to the dorsal forceps passing around it and thence down the other side encircling the other lateral forceps, and up to the point of beginning. The section of skin should be carefully dissected off, leaving the fascia and blood vessels undisturbed. The parts are now approximated and the stitches put in, completing the operation. Dr. Long prefers medium silk sutures, of best aseptic quality, placing the first stitch in the dorsal mediam line, and as many interrupted stitches are are necessary to close the sides.

Any simple aseptic dry dressing is all that is necessary, held by a suspensory bandage. The suspensory bandage is advised in preference to the perineal, as the latter frequently gives discomfort and is in the way. This operation can be made perfectly aseptic, and can be done without laying the patient up. If the foreskin should be a little tight it can be easily brought over the glans after the operation for a few hours, or until any constriction is relievevd, and after a few days it will be amply dilated. In cases where the foreskin is very tight it would be advisable to dilate gradually for a few weeks before operating, and when this cannot be done the author advises gentle and complete dilatation under anaesthesia, at the time of operating.

It is very necessary to be particular about the measurements, as the tendency is to remove too little rather than too much skin. The foreskin, as previously mentioned, being double, is very deceptive, and, unless great care is ex-

ercised, it will still be too long after the stitches are in. In the old method, the foreskin is drawn well down and excised, so that it falls back of the corona glandis, and the mucous membrane is split up and rounded off to fit, without any regard to measurements.

The author claims many advantages for this operation over the old, viz.: The delicate grading of skin with mucous membrane has not been disturbed; sensitive nerves are not severed; there is no hemorrhage except the very slight oozing from the capillaris of the severed skin; circulation has not been interrupted and œdema avoided; the wound can be made aseptic and less painful; the dressings do not become soiled or wet by the urine, and may remain until union is complete; the slight scar is covered by the hair, as it is reproduced; the operation is more easily done, and the wound is healed in half the time required by the old method.—*N. Y. Med. Jour.*

Surgical Hints.

In feeding a patient by the rectum it is a good plan to press rather firmly upon the anus for some time, say a quarter of an hour or more, after the injection has been given. This diminishes irritability and naturally favors retention.

In the treatment of Colles' fracture the question is not so much what form of splint or dressing should be employed, as whether perfect reduction has been attained. Use anesthesia and the X-rays rather than leave the slightest doubt in regard to this matter.

It is a good general rule never to give whiskey or other stimulants to a person who is bleeding, because it is apt to increase the hemorrhage and to augment the patient's excitement. Keep your stimulants away until after the bleeding has stopped, and they are often unnecessary by that time.

In some cases of inoperable cancer of the cervix severe pain sometimes occurs as a result of occlusion of the cervical canal. When this is the case it should be cleared out. Anesthesia is usually not necessary, but measures must be taken against the bleeding, which may be quite sharp and prolonged.

It must be accepted as a fact that in cancer the younger the patient the more active and rapidly fatal the disease will be. Hence while the patient's youth may lead to disbelief in the presence of cancer, careful observation is necessary in suspicious cases, for unless prompt

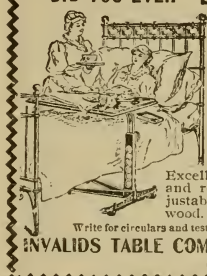
DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

DID YOU EVER ENJOY A MEAL IN BED?



Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient in the sick room. Excellent sewing, cutting and reading tables. Adjustable. Various kinds of wood. Beautifully finished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
CLEVELAND, O

interference takes place early in the disease, results are very rapidly disastrous.

It is well known that in at least one-half of the fatal cases of burns, shock is the direct cause of death. Hence the treatment must not only be local for the traumatism, but must also be directed to allaying and preventing shock. Pain is a very important element in the production of this condition, and the more thoroughly it can be relieved, the less will be the danger from shock.

In early cases of cancer of the uterus, vagina and cervex there is usually no bad odor. Hence the practitioner must not be led by its absence to diagnose a benign growth. As a matter of fact, in the majority of cases, by the time that a bad odor has developed the patients are beyond the reach of surgical aid. Pain, wasting and cachexia are also late symptoms in this region, and only occur after the case is a hopeless one.—*International Journal of Surgery.*

The Local Use of Iodine in Corneal Ulcers.

J. Lawton Hiers believes in regard to the preparation of iodine to be employed, that preference should be given the tincture. The eye should be first cocainized to complete anasethesia. An eye speculum should be introduced and the ulcer scraped thoroughly with a spud. The part should be well dried, and the iodine be thoroughly applied to the ulcer by means of an applicator. The excess should be dried off, and none of the drug should be allowed in direct contact with the healthy parts of the eye. The eye should then be bathed with sterilized water or boric solution, and then treated as a recent traumatism of the cornea. The writer believes that iodine is especially adaptable to ulcers that are indoleat in type. It lessens rather than increases scar tissue. The after-treatment should vary according to the indications of each individual case. The judicious use of iodine deserves the warmest praise. In some cases two, and even three, applications have been necessary to effect cure, but the majority of cases have readily yielded after its first employment.—*Med. Record.*

The Search for Ancient Horses.

During the last two years agents of the American Museum of Natural History have been exploring the Western plains from Texas to Montana for fossil horses, the expenses being met from a fund provided by Mr. William C. Whitney for reseaches in the evolution of the horse. The horse, in its origin, had several varying prototypes. The search has proved very successful, and the museum in New York already possesses many interesting specimens. This autumn the fossil remains of a small herd of the species called the hipparion have been discovered in Nebraska, from which it is believed that a complete animal can be mounted.

Uric Acid Bothers.

W. S. Stoakley says that when the treatment of uric acid conditions is undertaken, success will depend on the status of normality—whether it be low or high in this particular case. The cells are feeble in some persons *a puero* and sometimes inherited. Having freed the burdened eliminants—not by storm, but rather through persuasion of the skin, with a tender touch of the kidneys and mild opening of the viae primae, it can then be seen to what eccentric degree the emunctories have wandered. They

may have labored so hard that a little rest and a "toning up" may be absolutely required before any regular procedure as to drugs can be determined upon. In the meantime, noting the antagonisms to normality in this case, wherever they may harbor—in the earth, the air, the water, the age of the patient, the sex, the habits of the person, and all the little things in connection therewith—as men have learned what the little cell can do by way of cure in consumption, so it can do the same service in the affections under consideration, provided it is not handicapped at the time, or of anaemic birth.—*Med. News.*

Bubonic Plague.

Simon Flexner considers the nature, mode of spread, and clinical manifestations of bubonic plague, and states that, in spite of all efforts, it has invaded the Western continent. A stupendous progress has characterized the study of the present epidemic. The discovery of the bacillus of plague has centered attention upon the one agent of propagation; the study of the life history of the germ has eliminated the indefinite agents of conveyance included in air, soil, and water, and substituted tangible means of dissemination. This knowledge is bearing fruit already, as observed in the beneficial effects of evacuation of villages and quarters with thorough disinfection or destruction of premises. Inoculation with Haffkine's anti-plague remedy, according to the conclusions reached by the Indian Commission, is found to diminish the incidence of plague attacks, and diminishes the death rate. It does not appear to confer any great degree of protection within the first few days, but the protection lasts for some weeks, possibly for a number of months.—*Med. Record.*

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to
diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:
8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

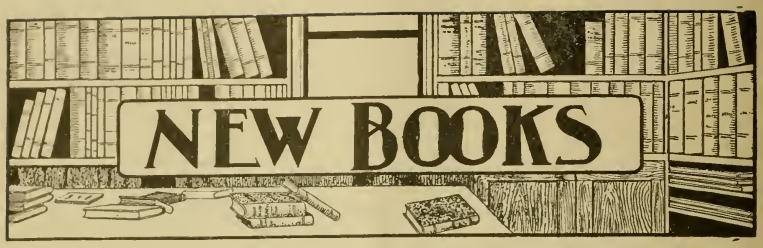
PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.



How to Succeed in the Practice of Medicine.—By Jos. M. Mathews, D. D., LL. D., ex-President of American Medical Association, etc., Louisville, Ky.: John P. Morton & Co.

The author has written his book with the intention of bringing before students and young practitioners of medicine that side of the medical art of which practically nothing is taught in our medical colleges. Dr. Mathews, who has shown by example how to succeed, is therefore well qualified to point out to his younger colleagues the paths which lead to success. The book is written in a captivating style, and the reader will be well repaid if the author's advice is followed.

The Outlook.—Mr. James Barnes, the well-known writer of naval affairs, who contributed to *The Outlook* an interesting series of letters from South Africa during the Boer war, has now gone to Venezuela on behalf of that journal, which will publish a series of articles from him giving vivid pictures of the country, its people, the state of affairs which now exists, and the developments which may come from the present crisis. It may be noted that Mr. Barnes tells in the current issue of *The Outlook* a peculiarly interesting and extraordinary chapter in the naval history of the United States. The article is called "The Tragedy of a Lost Commission," and relates to the story of Gustavus Conyngham, who was really the predecessor of Paul Jones as a privateer under the American flag. The first commission, which was issued to him by Gen. Hancock and handed to him by Benjamin Franklin, was lost, and for lack of it Conyngham suffered imprisonment, financial loss, and there was talk of hanging him as a pirate. This very commission was found, strangely enough, by Mr. James Barnes in the possession of an autograph and print seller in Paris. The article is fully illustrated with some quaint and interesting old cuts and a facsimile of the lost commission.

Treatment of Typhoid Fever With Castor Oil.

C. C. Bass holds that the serious muscular and nervous symptoms in typhoid fever are, to a very great extent, if not altogether, due to the absorption of toxins from the intestinal canal. The results of the castor-oil treatment prove this, he thinks, clearly enough. Take any case of uncomplicated fever, he says, in which the temperature ranges above 103 degrees F. Give a dose of castor oil every twelve hours, giving no other medicine at all, and the temperature will invariably be reduced; in three days it will generally be below 102 de-

WHEN ALL ELSE FAILS

SEND YOUR CHRONICS TO

VADE MECUM SPRINGS

Splendid Hotel and Cottage Entertainment, Hot and Cold Mineral Baths and Modern Sanitary Equipment

Let us ship your patients the water for use at home, in bottles, carboys or barrels. We have in North Carolina a water that has no domestic competitor, and no foreign superior. See analysis below:

Analysis of Vade Mecum Water.

Grains per U. S. Gallon, 231 cubic inches.

	GRAINS		GRAINS
Magnesium Sulphate	7.33524	Sulphuric Acid (SO3)	56.94360
Calcium Sulphate	25.71113	Sulphurous Acid (SO2)	.08514
Strontium Sulphate	.73481	Chlorine (Cl)	7.07743
Potassium Sulphate	1.17191	Iodine (I)	.00105
Sodium Sulphate	64.04838	Bromine (Br)-trace.	
Sodium Hyposulphate	.11663	Flourine (Fl)	.04665
Magnesium Carbonate	.50153	Phosphoric Acid (P2O5)	.00875
Calcium Carbonate	5.08299	Nitric Acid (NO3)	.41406
Strotium Carbonate	.13413	Carbonic Acid (CO2)	6.60976
Iron (ferrous) Carbonate	.39715	Lime (CaO)	13.43569
Lithium Chloride	.01399	Strontia (SrO)	.51319
Sodium Chloride	11.68057	Magnesia (MgO)	2.77594
Sodium Bromide traces	.——	Iron (FeO)	.24669
Sodium Iodide	.00122	Potash (K2O)	.63333
Sodium Arsenate	.00198	Soda (Na2O)	34.17817
Calcium Fluoride	.0 564	Lithium (Li)	.00234
Calcium Phosphate	.01168	Alumina (Al2O3)	.03499
Magnesium Nitrate	.49512	Silica (SiO2)	.67648
Alumina	.03499		
Silicic Acid	.67648		123.68326
Carbon dioxide, combined with Mono-Carbonates	2.68321		
	120.92846		

In general terms I would place this water under the purgative water; this class embraces the celebrated water of Pullna, Bohemia, Friedrichshall, Germany, and Carlsbad, Bohemia, though your water is considerably milder in its action than either of the above waters and *I think on that account preferable.*

This shows a complete analysis of Vade Mecum Mineral Water made by me.

HENRY FROEHLING,
Analytical and Consulting Chemist
RICHMOND, VA.

For sale by all Dealers and Druggists or

VADE MECUM SPRING CO. - - - Vade Mecum, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain CACTINA, the active proximate principle of CEREUS GRANDIFLORA.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for
INDIGESTION

A palatable preparation of PANAX SCHINSENG in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

grees, and always below 103 degrees. Mild delirium will subside in the same length of time. The effects of the oil are confined to the bowel. It eliminates from the intestines germs and toxins which would otherwise be absorbed. Diarrhœa and dysentery are prevented, or checked if they already exist; the disease runs a milder and shorter course, and patients do not lose flesh and strength so fast as they usually do under any other treatment. The last named result is its greatest advantage over any antiseptic treatment. The dose given varies with each case, but may be from one to eight drachms every twelve hours. Enough to act in from three to five hours should be administered, but not so much as to act more than twice. After one or two doses have been given, the amount can easily be regulated.—*St. Louis Medical Review.*

MEDICAL NEWS AND ITEMS.

Smallpox is prevalent in Rochester, Cleveland and Detroit.

The plague is reported to be raging in Mazatian province, Mexico.

St. Petersburg will shortly establish a special sanitarium for women alcoholics.

Several cases of tetanus are reported in Norfolk, Va., resulting from burns by toy pistols.

During his visit to Baltimore, Dr. Adolph Lorenz was the guest of the Johns Hopkins Hospital.

Surgeon-General O'Rielly reports a decided decrease of cholera among the troops in the Philippines.

There were 98,579 fatal cases among the 127,340 cases of bubonic plague in India between April 26 and October 4, 1902.

Two rooms at the Cincinnati City Hospital are to be fitted up especially for the treatment of acute poisoning cases.

The Congress of American Physicians and Surgeons will hold its sixth meeting at Washington, May 13th and 14th, 1903.

In Germany it is claimed that 70 per cent. of male and 68 per cent. of female cancer patients suffer from cancer of the digestive organs.

Surgeon H. R. Carter, U. S. P. H. M. H. service, has been detailed as representative to the coming Sanitary Conference which will shortly be held at Cairo, Egypt.

According to the annual report of the Indiana State Board of Medical Examination and Registration, there are 5,880 phpysicians in that State.

By the will of the late Mathews Gottfried, of Chicago, $2,000 is bequeathed to the Christian Brothers Hospital, $3,500 to the Mercy Hospital, and $2,000 to the German Hospital.

According to a press dispatch smallpox is epidemic on the island of Turni, in the Aegean Sea, near Samos. More than 2,000 out of a total population of 2,500 have died of the disease.

The Philadelphia Bureau of Charities has asked the Finance Committee of that city for $2,500,000 to buy sites and erect a building for an almshouse, hospital for insane poor, and municipal hospital.

The International Sanitary Conference of the American Republics was in session in Washington the first week in December. The governments of Mexico, Cuba, Chili, Costa Rica, Salvador, Honduras and the United States were represented.

The title of "doctor" was invented in the twelfth century, and conferred for the first time upon Inerius, of the University of Bologna. The first "doctor of medicine" was Gulielmo Gordenio, who received his degree from the college of Aosti, in Italy, in 1220.—*Exchange.*

It has been announced that all physicians now practicing medicine in the

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROHERTIES of these Preparations.

A

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation

R Each fluidounce contains:

Hypophosphites Soda	2 gr.
" Lime	1½ gr.
" Iron	1½ gr.
" Quinine	¾ gr.
" Manganese	1½ gr.
" Strychnine	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate Sodium	12 grains.
" Potassium	4 "
" Calcium	4 "
" Iron	2 "
FREE Monohydrated Phosphoric Acid	16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

C

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence of a sedentary life, coupled with nervous and mental stal strain.

Rell ble Pepsin is one of the best Digestive agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating Children, one half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.

Indications: Sleep'essness, Irritability. Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromatic menstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable.

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50.

N. B.—We also make **25 per cent. strength.**
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

Saloform, in Powder, per ounce	$1 25
Saloform, 5-grain Tablets, per 100	1 25
Saloform Elixir, pints	2 00
Solution Albuminate of Iron, Syrup Albuminate of Iron Comp., pints	1 00
Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

Please specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

Founded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

NCMed J (05) 49: 44, #1 Jan 1903

Hawaiian Islands, says the *Philadelphia Medical Journal,* will have to take examinations to secure new licenses, on the recommendation of the board of medical examiners recently appointed. The Japanese physicians have protested against passing new examinations. There are in all thirty-one physicians practicing in Hawaii.

The thirtieth annual meeting of the American Public Health Association was held at New Orleans, December 8 to 12. Among the subjects discussed were the pollution of public water supplies, the disposal of refuse material, animal diseases and animal foods, cars, steamships and steamboat sanitation, the etiology of yellow fever, and the cause, prevention, incubation, and duration of infectious diseases.

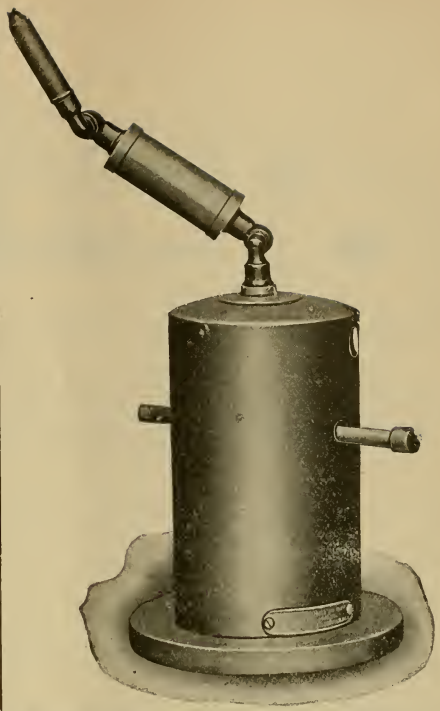
The Christian Scientists of White Plains, New York, who were recently indicted for manslaughter, have raised some interesting legal points in their defense. The chief contentions of the defense are that under the Constitution the members of the Christian Scientists church have a right to liberty of thought and the use of their faculties, that there is no law which compels medical attendance, and there is no law compelling a parent to give his or her child drugs.

A man was walking along the Boulevard Saint Michael, Paris, one day recently, and stopped to light a cigarette. Suddenly his nose burst into flames, which spread to his beard. A crowd assembled, while the unfortunate man danced with pain until a policeman took him to a pharmacist's shop, where the burns were treated. An examination of the nose showed that it was celuloid, the unscrupulous dealer who sold it having foisted it on his client instead of the horn nose which had been prescribed.—*Exchange.*

Work of the University Medical Department at Raleigh.—A most auspicious beginning is reported from the medical department of the University of North Carolina at Raleigh. The first half session shows an enthusiastic faculty, a number of earnest, working students and a prosperous management of the school's affairs. Clinical material has been abundant, amply sufficient for each student to receive individual instruction in its true sense, while a combination of the lecture, quiz and ward class has proved a most successful teaching system. Over 100 patients have been treated at the free dispensary, with an average of eight to ten visits at each hour. Students have access to the Rex Hospital and St. Agnes' Hospital, and the wards of both these institutions are in sole charge of the faculty of the Medical School during the entire session, each teacher in his own department. The building devoted to the work contains lecture rooms, office, dispensary and a well equipped clinical laboratory, and is in the most convenient part of the city. Since the two years' course given at Raleigh forms the last two years of medical study, the instruction there is largely clinical, the fundamental branches being taught in a thorough two years' course at Chapel Hill. Following is the complete list of the faculty of this advanced department: H. A. Royster (Dean), Gynecology; A. W. Knox, Surgery; W. I. Royster, Medicine; R. H. Lewis, Eye and Hygiene; K. P. Battle, Jr., Ear, Nose and Throat; A. W. Godwin, Clinical Medicine and Dermatology; H. McK. Tucker, Obstetrics and Pediatrics; J. W. McGee, Jr., Chief of Dispensary; R. S. McGeachy, Assistant in Surgery and Gynecology; Wm. Moncure, Jr., Assistant in Dispensary; Wm. DeB. MacNider, Clinical Pathology.

Electric
Heater
Used by
Dr. Hopkins
in
Treating
Deafness.

THE TERRY HEATER CO.,
Cleveland, Ohio.



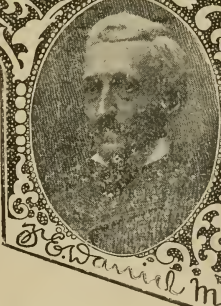
SOMETHING FOR LEISURE HOURS

STORIES OF A COUNTRY DOCTOR

RECOLLECTIONS OF A REBEL SURGEON

ALL WORK AND NO PLAY MAKES JACK A DULL BOY

Here are two books chock full of wit, fun and pathos, that should be on every doctor's table. Their titles tell the story. They speak for themselves. Each $1, post-paid



The Clinic Publishing Company, - Ravenswood Station, Chicago.

Newer Materia Medica.

Nose and Throat Affections.

By C. H. Powell, A. M., M. D., Professor of Physical Diagnosis and Clinical Medicine, Barnes Medical College, St. Louis, Mo.

Now that the season of the year is upon us at which time disturbances of the nose, throat and lungs are predominant, an article calling attention to the different affections, their causes, pathological characteristics, and treatment is certainly of practical importance. Nasal involvement is the most common morbid phenomenon we meet with of every degree from simple congestion of the Schneiderian membrane to ulceration, hypertrophy, and deflection of the nasal septum. One of the first symptoms that a trouble exists in the nose is indicated by the presence of abnormal nasal discharge.

There is a class of patients who are sufferers from a chronic nasal discharge whose condition is due to the occupation engaged in; thus those who work in factories where the air is continually loaded with dust and debris, being constantly exposed to the irritating influence of these particles, the nasal disturbance is perpetuated. In this class of cases the same plan of action is referable, namely, first, through cleansing of the nose with Glyco-Thymoline in a 25 per cent. strength and the after application of an unguent.

There is still another class of cases that are very persistent in resisting different kinds of treatment. I refer to what is technically known among the people as chronic nasal catarrh. In this class of subjects the pathological state of the nose is to be carefully enquired into, as the catarrhal discharge is only a symptom of something else; this something else constitutes the disease to be treated. In one case it will be found to be an hypertrophic rhinitis, in another a stenosis of one of the nares from a deflected septum, and in a third case, especially in the case of a child, the presence of a foreign body, a tumor, or polypus. Treatment of the nasal discharge, therefore, to be efficacious, should consist in directing attention to whichever one of these or other conditions are found to be responsible for the catarrh. In all cases, however, due to whatever cause, the action of Glyco-Thymoline has impressed me most favorably. I will outline a half dozen cases wherein I have derived the most gratifying results from this remedy.

Case 1. *Acute Rhinitis.*—A lady consulted me with a very bad cold, which had been persisting to her intense annoyance for several days. She called upon me in the belief that the difficulty was increasing instead of diminishing. Posterior nasal washing was at once done, using Glyco-Thymoline in warm water, one part to six, and the nasal fossae sprayed with cocaine solution; patient was also given a six-ounce bottle of Glyco-Thymoline solution, and advised to apply with an atomizer three

ηλεκτρον
Is the greek name for Amber.
It is pronounced Electron.

DID YOU EVER THINK

Over the fact that Amber was the first product in which Electricity was found, and this because Amber is the most Electric Product known.

An Electric Machine built with the same productive element is an old thing made new again.

It can be used for X-Ray and Electrical Treatments, for the treatment of Cancer, Epitilioma, Lupus, Sarcomaect. It does better and more than any other Static or Electric Machine.

Write us for particulars before you buy.

THE SORENSEN M'F'G. CO.

RAVENNA, OHIO, - - - U. S. A.

When writing advertisers please mention this Journal.

times a day. Recovery was prompt and thorough under its use.

Case 2. *Hypertrophic Rhinitis.*—This case was in a man who worked outdoors in all kinds of weather. In addition he was an inveterate tobacco user, smoking as many as two dozen pipes of tobacco daily. He was also subject to great relaxation of the pharyngeal structures, had a cough, enlarged tonsils, and was a terrible snorer, sleeping with his mouth open. This patient was treated with Glyco-Thymoline in solution, and the throat frequently gargled with a 50 per cent. solution of the same remedy. Internally, quinine, iron, and strychnia were given him, and he was advised to lessen the amount of tobacco he was consuming. He was also told to dress more warmly. The outcome of the case was very slow, but an uneventful recovery took place.

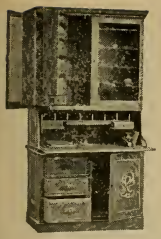
Case 3. *Tobacco Pharynx.*—This patient came to me for an annoying cough, which upon inspection I discovered was due to an intense hyperaemia of the pharyngeal structures. He was given a 25 per cent. solution of Glyco-Thymoline and instructed to gargle his throat often with the medicine. I saw him a week later, and he advised me that, very much to his own and his wife's delight, the cough had entirely disappeared.

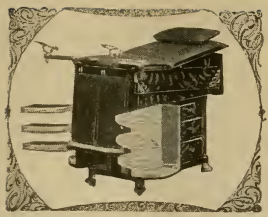
Case 4. *Diphtheria.*—I have used Glyco-Thymoline in cases of diphtheria with good results. My favorite combination is composed of the following: Glyco-Thymoline 50 per cent., Per Oxide of Hydrogen 50 per cent., for use in the atomizer every hour or so. Although mentioning this under case fourth, I will not specify any particular case, as I employ this prescription in all cases of diphtheria. Of course, Gylco-Thymoline has no specific influence other than a strong, reliable and harmless antiseptic.

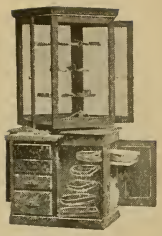
Case 5. *Chronic Gastritis.*—Having satisfied myself of the signal utility of Glyco-Thymoline in the previous conditions outlined, determined me to test its efficacy in the operation of lavage. A few days ago a conductor on a street railway in St. Louis came to my office complaining with chronic gastric disease. He had a foul, coated tongue, and said he always felt bloated after meals. I employed lavage, using sodium bicarbonate and Glyco-Thymoline, two tablespoonfuls of soda and six tablespoonfuls of Glyco-Thymoline to a quart of hot water. The patient experienced so much relief from this remedy that he returned unsolicited four days later and asked that I repeat the process, which I did. He sent me several other railroad men, and the results in each case were the same.

Case 6. *Acute Cystitis.*—A gentleman who sustained an injury to his spinal column from suddenly alighting from his bicycle, had as a result paralysis of his lower extremities in which his bladder participated, was troubled with acute cystitis and its concomitant evils. For the correction of this his bladder was irrigated with a tablespoonful of Glyco-Thymoline and a tablespoonful of boracic acid to a pint of warm water. It was not necessary to repeat this process more than three times when the relief was established, frequent micturition disappeared, and necessity for the continued use of the catheter was oviated.

These cases demonstrate, beyond peradventure of a doubt, the therapeutic







A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your patients. Therefore, in the selection of your equipment you should exercise great care. The testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

Are the best and are adapted to all lines of regular and special practice. They are superior in workmanship and design, and include more conveniences than any other line on the market. (Catalogue "A" fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

A Sanitorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

Beautifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

MAPLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

---

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &C.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents.

Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

POLK'S is the only complete Medical Directory.

POLK'S is the only Medical Directory having an index to all physicians in the United States.

POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

efficacy of Glyco-Thymoline as a remedial agent.

KRESS & OWEN COMPANY,
Manufacturing Chemists, 210 Fulton St., New York.

Manufacturers of Glyco-Thymoline, K. & O. Bermingham Nasal Douches.

Sanmetto in Cystitis, Urethritis, Prostatitis and General Inflammation of the Genito-Urinary Tract.

I am an earnest friend of Sanmetto. It is a valuable and ethical preparation. From years of experience in its use I have learned to rely upon it in cases of cystitis, urethritis, prostatitis and general inflammation of the genito-urinary tract. In cases where its use is indicated its curative properties are most remarkable. I am satisfied if the profession will carefully discriminate in their cases they will always be well pleased with the results obtained from the exhibition of Sanmetto. I shall continue its use where indicated.

W. E. J. MICHELET, M. D.
Chicago, Ills.

Sanmetto in Irritable and Atonic Conditions of the Genito-Urinary Organs.

I have used Sanmetto quite extensively in my practice for a number of years, and have learned from the universally good results obtained from its use to pin my faith to it in all irritable or atonic conditions of the genito-urinary organs. I find it the *true* aphrodisiac in both male and female patients. Since I have used Sanmetto prostatitis has lost much of its terrors and cystitis has ceased to be the grave disease it was before its use. I shall continue to prescribe Sanmetto.

F. A. CROMLEY, M. D.
Gallipolis, Ohio.

Listerine is Best Advertised by Listerine.

In the beginning it was promptly accepted by the profession as an essential antiseptic for the sick room. It is now recognized the world over as a domestic necessity. The home that has not a bottle of listerine in it is rarely to be found, and when found the deficiency should be made good promptly.

Celerina is a powerful stimulant without the depressing after-effects of alcohol, coffee, nitro-glycerine, etc. It is also a reliable nerve tonic. A pleasant exhilaration is experienced after a dose of one or more teaspoonfuls, and under its continued use a renewed capacity for mental and physical exertion results. It is indicated in all forms of exhaustion, mental inertia and senile weakness.

We call the attention of our readers to the advertisement of the Robinson-Pettet Co., Louisville, Ky., which will be found on another page of this issue. This house was established fifty years ago, and enjoys a widespread reputation as manufacturers of high character. We do not hesitate to endorse their preparations as being all they claim for them.

Nasal Headaches.

Adolph Bronner (*Med. Jour.*) thinks that if a careful examination of the nasal cavities were made, many of the chronic so-called incurable headaches would be relieved. Nasal headache is often neuralgic in character, and is always better in the morning. Nasal headache may be chiefly supraorbital or post-orbital, and is sometimes felt at the top or back of the head, being more commonly diffuse in nasal obstruction. Dizziness is a frequent accompaniment.

Exercise Without Apparatus
Taught by mail — in your own home

FREDERICK W. STONE
Athletic Director of The Stone School of Physical Culture
Formerly athletic instructor of Columbia College and the Knickerbocker Athletic Ass'n, New York. At present athletic instructor of the Chicago Athletic Ass'n, where he has classes daily from 12 to 1 and from 4 to 6. He established the world's record for 100 yards sprint (9 4-5 seconds) and held it unbeaten until 1902. Has been an instructor in physical culture for 32 years.

Mr. Stone's extensive experience with institutions of the highest character better qualifies him than any other instructor to teach men and women the science of self-development.

WE are successfully teaching men and women in every part of the world how to get well and how to stay well; how to broaden the shoulders, deepen the chest, and increase the lung capacity; how to improve the circulation; how to correct chronic complaints of the stomach and bowels; how to obtain sound, restful sleep; how to increase the weight or reduce it. We teach them how to obtain all this physical wealth by exercising only 10 to 20 minutes each day, just before retiring or upon arising. **The Stone Method** is a system of concentrated exertion, by which more exercise is actually obtained in 10 minutes than by the use of apparatus two hours, and embraces a thorough course in **deep breathing** without extra expense. **Does not overtax the heart.** The exercises are rational, moderate, and are taught by an instructor thoroughly versed in physiology. Individual instruction is given in every case according to the requirements of the pupil.

Follow our instructions and we promise you a fine, strong, well-developed physique, which bears every evidence of perfect manhood; a clear brain; a light step; a splendid circulation; a ruddy complexion; bright eyes; sound, easy-working lungs, with plenty of room in which to expand; an increased appetite; good digestion; an active liver; sound, restful sleep; an erect carriage.

WOMEN receive as much benefit from **The Stone Method** as men. However, no woman desires the same muscular development which she admires in men, which proves again the desirability of our individual instruction. We take into consideration the occupation, habits, mode of living, etc., and give instruction accordingly. We can insure perfect health, a good complexion, and, when desired, an increased chest (or bust) development; can increase the weight or reduce it; can fill out those hollow places and give the form that beautiful contour so much desired; can positively reduce the abdomen also.

We should like to hear from every woman who has enough interest in her health and in her perfect development to read this advertisement. We have some literature and testimonials which we will send FREE for the asking, and we are confident they will not only prove interesting, but convincing proof of the superiority of **The Stone Method** over any other system.

Mr. Stone is the only physical instructor paying special attention to women and children. He is ably assisted by Mrs. Ellen Walker, who has had a very extensive experience, and who alone opens and answers letters of a private nature. Confidential letters may be addressed **"Mrs. Ellen Walker, care The Stone School."**

ILLUSTRATED BOOKLETS AND TESTIMONIALS FREE BY MAIL

It is impossible, in this limited space, to convey an adequate idea of the importance of **The Stone Method** of physical culture in attaining and maintaining perfect development and good health. We have prepared a booklet for men and one for women which explain the system in detail, our plan of mail instruction, etc. These booklets contain many photos from life, showing what others have accomplished by **The Stone Method**. **SENT FREE BY MAIL**, together with fac-simile testimonials, measurement blanks, etc. Write today. The booklets will prove interesting.

The Stone School of Scientific Physical Culture

1687 MASONIC TEMPLE, CHICAGO, ILL.

LONDON: 4 Bloomsbury Street, New Oxford Street, W. C.

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED IN 1881—OPENED IN 1882.

The New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant, and the hospital wards adjoin the lecture rooms. Since the fire in 1896, a new building has been erected and thoroughly equipped, and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James P. Tuttle, M. D.; John A. Wyeth, M. D.
MEDICINE—Isaac Adler, M. D.; Morris Manges, M. D.; W. H. Katzenbach, M. D.; W. W. Van Valzah, M. D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt. H. Wylie, M. D.; Brooks H. Wells, M. D.; W. Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—Augustus Shibert, M. D.
DERMATOLOGY—Edward B. Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O. Born, M. D.; W. E. Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M. D.; Robert C. Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederick Whiting, M. D.
EUROLOGY—B. Sachs, M. D.
OBSTETRICS—Edward A. Ayers, M. D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York.

THE CHARLOTTE OBSERVER,

CHARLOTTE, N. C.

J. P. CALDWELL, Editor. DAILY AND SEMI-WEEKLY.

North Carolina's Foremost Newspaper.

Independent and fearless; bigger and more attractive than ever. The most complete telegraphic Press reports in existence. All the news of the world. Complete Daily reports from the State and National Capital

SUBSCRIPTION PRICE.

Three Months	$2 00
Six Months	4 00
One Year	8 00

THE SEMI-WEEKLY OBSERVER, Published on Tuesdays and Fridays at $1 00 per year.

CASH OR CREDIT.

Catalogue FREE.

PRICE $33.50

It will pay you to send for our Catalogue No. 6, quoting prices on Buggies, Harness, etc. We sell direct from our Factory to Consumers at Factory Prices. This guaranteed Buggy only $33.50; Cash or Easy Monthly Payments. We trust honest people located in all parts of the world.

Write for Free Catalogue.

MENTION THIS PAPER.

CENTURY MF'G CO. DEP'T 352 East St. Louis, Ill

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

Preparation—Par Excellence

"Fellows'

Syrup of Hypophosphites"

CONTAINS

Hypophosphites of

Iron,	**Lime,**
Quinine,	**Manganese,**
Strychnine,	**Potash.**

Each fluid drachm contains Hypophosphite of Strychnine equal to 1-64th grain of pure Strychnine.

Offers Special Advantages

in Anaemia, Bronchitis, Phthisis, Influenza, Neurasthenia, and during Convalescence after exhausting diseases.

Dr. Milner Fothergill wrote: "It (Fellows' Hypophosphites) is a good all-round tonic, specially indicated where there is NERVOUS EXHAUSTION."

SPECIAL NOTE.—Fellows' Hypophosphites is *Never sold in Bulk,* and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

MR. FELLOWS, 26 Christopher St., New York.

LITERATURE OF VALUE UPON APPLICATION.

Presbyterian College for Women....

Charlotte, N. C.

Magnificent New Buildings. Every Essential of Health and Comfort. Good Fare. Experienced Teachers. Standard Advanced. Music and Art our Specialties. Charges lower than any other School of same grade in the South.

REV. J. R. BRIDGES, D. D., President.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

Samples and Literature supplied by

AGURIN
The Non-Irritating Diuretic.

EPICARIN
The Non-Toxic Dermal Parasiticide.

SALOQUININE
The Tasteless and Improved Quinine.

HEDONAL
The Promoter of Natural Sleep.

FERRO-SOMATOSE
The Ferruginous Nutrient and Tonic.

PROTARGOL
Antigonorrheal, Antiseptic

ASPIRIN
The Best Salicylate.

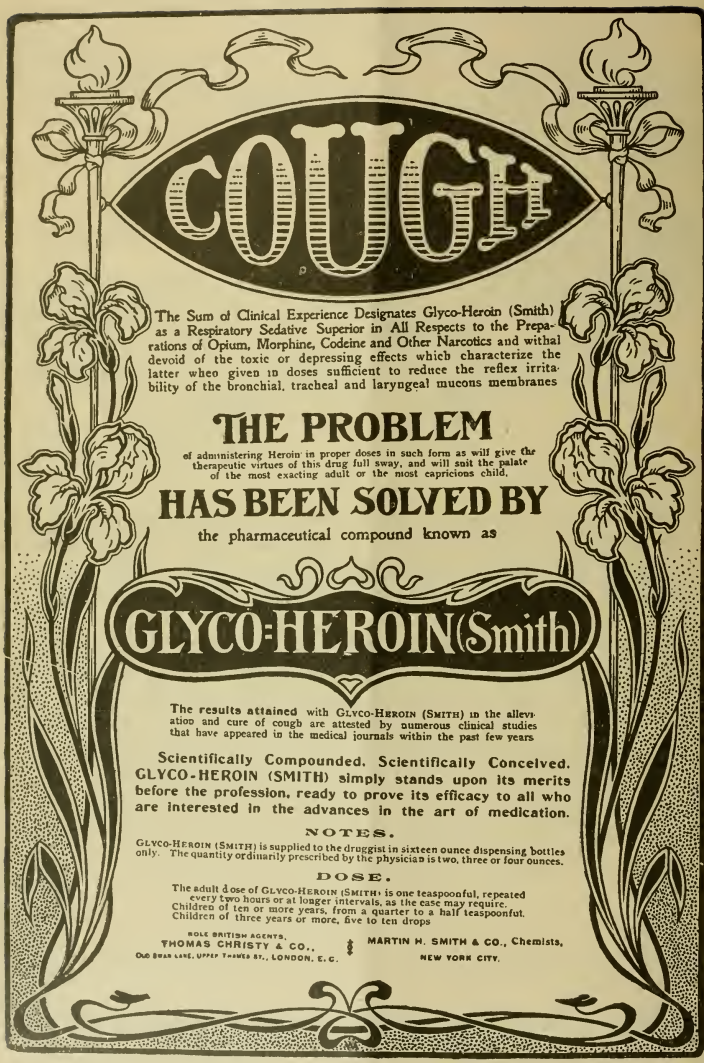
MELLIN'S FOOD

and fresh milk is, physiologically, a proper infants' food; it contains the correct amount of necessary nutritive elements, and combines them in the right proportion, and does not introduce insoluble, indigestible and non-nutritious constituents.

Mellin's Food is a food that feeds.

Samples of Mellin's Food sent to any physician upon request

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS


COUGH
The Sum of Clinical Experience Designates Glyco-Heroin (Smith) as a Respiratory Sedative Superior in All Respects to the Preparations of Opium, Morphine, Codeine and Other Narcotics and withal devoid of the toxic or depressing effects which characterize the latter when given in doses sufficient to reduce the reflex irritability of the bronchial, tracheal and laryngeal mucous membranes
THE PROBLEM
of administering Heroin in proper doses in such form as will give the therapeutic virtues of this drug full sway, and will suit the palate of the most exacting adult or the most capricious child,
HAS BEEN SOLVED BY
the pharmaceutical compound known as
GLYCO-HEROIN (Smith)
The results attained with GLYCO-HEROIN (SMITH) in the alleviation and cure of cough are attested by numerous clinical studies that have appeared in the medical journals within the past few years.
Scientifically Compounded. Scientifically Conceived.
GLYCO-HEROIN (SMITH) simply stands upon its merits before the profession, ready to prove its efficacy to all who are interested in the advances in the art of medication.
NOTES.
GLYCO-HEROIN (SMITH) is supplied to the druggist in sixteen ounce dispensing bottles only. The quantity ordinarily prescribed by the physician is two, three or four ounces.
DOSE.
The adult dose of GLYCO-HEROIN (SMITH) is one teaspoonful, repeated every two hours or at longer intervals, as the case may require.
Children of ten or more years, from a quarter to a half teaspoonful.
Children of three years or more, five to ten drops
SOLE BRITISH AGENTS,
THOMAS CHRISTY & CO.,
OLD BEAR LANE, UPPER THAMES ST., LONDON, E. C.
MARTIN H. SMITH & CO., Chemists,
NEW YORK CITY.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

PEACOCK'S BROMIDES

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.
DOSE:
One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day.

OD CHEM. CO., NEW YORK.

St. Luke's Hospital,

1000 West Grace St.,

RICHMOND, VIRGINIA.

Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,

RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.

AS The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our
. . . regular eleven-ounce hexagonal bottle, . . .
you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

TRUE ANIMAL IRON

Physicians everywhere are looking for a **Blood** reconstructant that contains every element of nutrition of the animal, mineral and vegetable kingdoms, viz: **Animal Iron;** a reconstructant that will supply every deficiency in the blood of anaemic patients in adequate quantity and quality: one that will nourish—stimulate—assimilate—without tax on the digestive organs. These requirements are all found in perfection in

BOVININE

It Contains 10% Animal Iron,

20% Coagulable Albumen, and all the constituents of healthy **Blood.**

It is thoroughly sterile, requires little or no digestion, and produces blood corpuscles that **Mature.** Corpuscles of fullness and integrity. Herein lies its great superiority over any and all the preparations of inorganic iron. Your microscope will prove the truth of these facts. Our scientific treatise on Haematherapy for the asking. It contains reports of hundreds of cases.

THE BOVININE COMPANY

75 West Houston St., New York

OBSTETRICAL BAG,

Lined With Chamois.

Price, including bottles:

15 inch	$4 25
16 "	4 50
17 "	4 75
18 "	5 00

Cabin Form Obstetrical Bags

Lined With Rubber Cloth and Built on Steel Frame.

Price, including bottles:

15 inch	$5 25
16 "	5 75
17 "	6 00
18 "	6 25

THE VALZAHN COMPANY,

Manufacturers and Importers of Surgical Supplies,

132 South Eleventh St., Philadelphia, Pa.

BROADOAKS SANATORIUM,

MORGANTON, NORTH CAROLINA.

A Private Hospital for the Treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

ISAAC M. TAYLOR, M D. JOHN McCAMPBELL, M. D.

100 TABLETS FREE. . . . . RETURN THIS AD.

ALKAGESTA

Trade Mark

(Alkaline Digestive)

Being an exposition of all the Vegetable and Animal Digestive Ferments that are active in the Alkaline secretions.

FOR THE TREATMENT OF

Intestinal Indigestion and Amylaceous Dyspepsia.

Alkagesta (Liquid) cost one dollar per pint bottle, and the dose is from one to four teaspoonfuls immediately before or after meals or both.

Alkagesta Tablets will not dissolve in the stomach, and cost on prescription 25c. for 35 tablets, or sold direct to the doctor in bottles of 500 or 1,000 tablets. Dose, one to three tablets before or after eating.

WATERBURY LABORATORIES, SELLING AGENTS,

12 West Broadway, New York.

LAPACTIC PILLS

Have you received your sample?

SHARP & DOHME

BALTIMORE

NEW ORLEANS ST. LOUIS CHICAGO

NEW YORK

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

THE LITERARY DIGEST

An Illustrated Weekly Magazine of information and discussion on all chief subjects of human interest, as digested from the world's choicest periodical literature. The intelligent of every rank and creed consider that for the most profitable periodical reading published it excels:

BECAUSE when time is precious it enables you to make the most of every reading moment, providing you with the cream of nearly 1,000 of the world's most valuable periodicals.

BECAUSE it selects, translates, digests, or reprints the best literature to be found in the numberless periodicals printed in all lands, giving its subscribers the benefit of expert editorial skill and discrimination.

BECAUSE it enables you to greatly economize your expenditures for periodicals, making it possible to get the best articles in a greater number than you would ever subscribe for, and this for the price of only a single subscription.

BECAUSE regular readers of THE LITERARY DIGEST become versatile on all sides of topics of current interest and discussion in politics, science, literature, art, religion, etc.

Send in Your Subscription Now for the Next Year. $3.00 per Year. Single Copies, 10 Cents.

FUNK & WAGNALLS CO., NEW YORK.

Table of Contents.

PAGE

EDITORIAL:

What Can Be Done to Lessen the Mortality of Carcinoma Uteri? 53

Post-Operative Treatment of Abdominal Cases 54

Editorial Selections.. 55

ORIGINAL COMMUNICATIONS:

Report of Two Successful Cases of Rectopexy or Suspension of the Rectum on the Sacrum: S. T. Earle, M. D.... 59

Subaceous Cyst—Ostitis Deformans—Laminectomy: William L. Rodman, M. D. 61

SELECTED PAPERS 64

NEWER MATERIA MEDICA 72

Newer Materia Medica—Continued..... 82

THERAPEUTIC HINTS..... 78

BOOK REVIEWS 84

REVIEW OF MEDICAL AND SURGICAL PROGRESS 86

NECROLOGY 92

EYE, EAR, NOSE AND THROAT DEPARTMENT 94

MEDICAL NEWS AND ITEMS..... 96

IF IN NEED
OF A RECONSTRUCTIVE, NERVE AND MUSCLE BUILDER, WHERE THERE IS ALSO A DEMAND FOR MORE AND BETTER FLESH,
CORD. OL. MORRHUAE COMP.
(HAGEE)
IT WILL MEET ALL REQUIREMENTS
CONTAINS all the potent elements of cod liver oil, and has been thoroughly tested and fully endorsed by our most eminent physicians. It is no experiment to prescribe
HAGEE'S CORDIAL OF COD LIVER OIL
WITH HYPOPHOSPHITES OF LIME AND SODA
Dispensed in 16-ounce bottles by all Druggists
KATHARMON CHEMICAL CO., ST. LOUIS, MO.

Index to Advertisers.

	PAGE
Parke, Davis & Co. ..... Cover	1
Lambert Pharmacal Co. ..... "	2
Mr. Fellows ..... "	3
Presbyterian College for Women "	4
Bayer Pharmaceutical Products	1
Mellins Food Co.	1
Martin H. Smith Co	2
Od Chemical Co.	3
St. Luke's Hospital	3
M. J. Breitenbach Co.	4
The Bovinine Co.	5
The Valzahn Co.	6
Broadoaks Sanatorium	6
Waterbury Laboratories	7
Sharp & Dohme	8
Funk & Wagnalls	9
Katharmon Chemical Co	10
Mariani & Co.	11
The Antikamnia Chemical Co.	11
Oakland Chemical Co.	12
Battle & Co.	12
University of Pennsylvania	13
The Halcyon Retreat	13
Kress & Owen Co.	13
The Purdue Frederick Co.	14
Rio Chemical Co.	14
Wm. R. Warner & Co.	79

	PAGE
Charles N. Crittenton Co.	81
Vapo-Cresolene Co.	83
The Keeley Institute	83
Dad Chemical Co.	83
John Wanamaker	85
Dr A. M. Whisnant	89
Invalids Table Co.	89
The Tilden Co.	90
Dr. E. R. Russell	91
Dr. A. J. Crowell	91
Dr. W. O. Nisbet	91
Dr. W. H Wakefield	91
Vade Mecum Spring Co.	93
Sultan Drug Co.	93
Robinson-Pettet Co.	95
The Terry Heater Co	97
Clinic Publishing Co.	97
W. D. Allison Co.	101
Maplewood Sanatorium	101
Munn & Co.	101
R. L. Polk & Co.	101
Stone School of Scientific Physical Culture	103
N. Y. Poly. Med School and Hospital	104
The Charlotte Observer	104
Century Mfg. Co.	104

Written endorsements from upwards of 8,000 physicians prove

VIN MARIANI

During 40 years invariably

"THE STANDARD PREPARATION OF ERYTHROXYLON COCA."

Most useful adjuvant in general treatment as a

TONIC, RESTORATIVE, MILD STIMULANT.

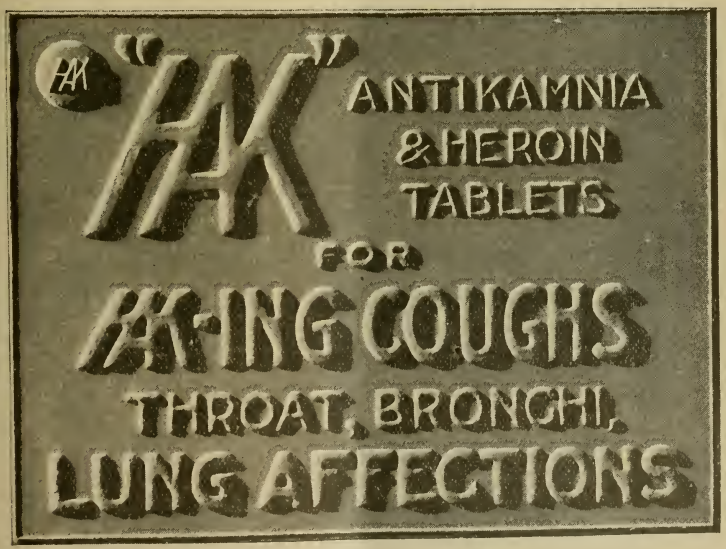
SENT POSTPAID:

80 Page, Illustrated Monograph by European and American observers, with formula, dose, etc., cloth-bound, will be forwarded postpaid to any physician on application.

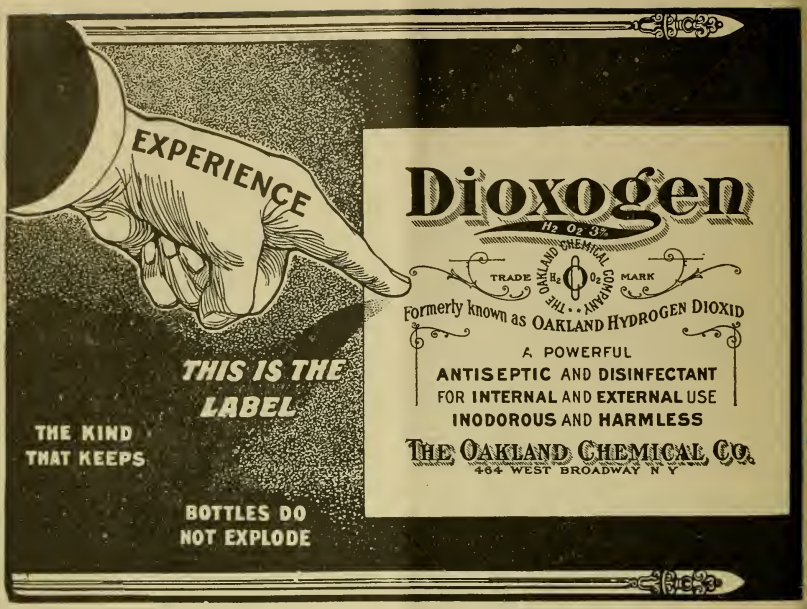
PARIS: 41 Boulevard Haussman.
LABORATORY: Neuilly, Sur-Seine, France.
LONDON: 49 Haymarket.
BERLIN: 56 Charlotten Strasse.
MONTREAL: 87 St. James Street.

MARIANI & CO.,
52 West 15th St., New York.

VIN MARIANI on sale at Druggists throughout the World. CAUTION.—Refuse Substitutes, Avoid Disappointment.



Five-Grain Antikamnia Tablets
Laxative Antikamnia & Quinine Tablets
| AK |
Antikamnia & Codeine Tablets
Antikamnia & Heroin Tablets



ECTHOL, NEITHER ALTERATIVE NOR ANTISEPTIC IN THE SENSE IN WHICH THOSE WORDS ARE USUALLY UNDERSTOOD. IT IS ANTI-PURULENT, ANTI-MORBIFIC--A CORRECTOR OF THE DEPRAVED CONDITION OF THE FLUIDS AND TISSUES.

SAMPLE (12-oz.) BOTTLE SENT FREE ON RECEIPT OF 25 CTS.

FORMULA:--Active principles of Echinacia and Thuja.

BROMIDIA
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U. S. A.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

University of Pennsylvania

Department of Medicine.

The 138th Annual Session will begin on the last Friday in September, 1903, at 12 m., and will end at Commencement, the third Wednesday in June.

The Curriculum is graded, and attendance upon four annual sessions is required.

Practical Instruction, including laboratory work in Chemistry, Histology, Osteology, Bacteriology, Pathology, Physiology and Pharmacy, with bedside instruction in Medicine, Surgery, Gynæcology and Obstetrics, is a part of the regular course, and without additional expense.

For catalogue and announcement containing particulars, apply to

DR. CHAS. H. FRAZIER, Acting Dean,

36th St. and Woodland Ave., Philadelphia.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.

Dr. W. F. Goldsmith, General Surgery.

Dr. C. C. Stockard, General Medicine and Drug Habits.

Dr. S. G. C. Pinckney, Nervous Diseases.

Dr. J. M. Crawford, Eye, Ear, Nose and Throat.

Dr. Michael Hoke, Orthopoedic Surgery.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

17 W. Cain Street, Atlanta, Ga.

THE ALKALINITY OF BLOOD SERUM

GLYCO-THYMOLINE

(KRESS)

ASEPTIC
ALKALINE, ALTERATIVE

A Purgative for Mucous Membrane

INDICATED IN ALL CATARRHAL CONDITIONS

HASTENS RESOLUTION
FOSTERS CELL GROWTH

SAMPLES AND LITERATURE ON APPLICATION

KRESS & OWEN COMPANY, 221 Fulton St., New York.

JUST NOW

when the debilitated and poorly nourished are subject to coughs and colds, the remedy of most value is

GRAY'S Glycerine TONIC Comp.

Its specific action on the respiratory organs is second only to its unique value in malnutrition and general debility

THE PURDUE FREDERICK CO.
No. 15 Murray Street, New York

A Useful Nerve Stimulant and Tonic.

CELERINA is a powerful stimulant WITHOUT the depressing AFTER-EFFECTS of alcohol, caffeine, nitro-glycerine, etc. It is also a reliable Nerve Tonic. A pleasant exhilaration is experienced after a dose of one or more teaspoonfuls, and under its continued use a renewed capacity for mental and physical exertion results. It is indicated in all forms of exhaustion, mental inertia and senile weakness.

DOSE: One or Two Teaspoonfuls Three Times a Day.

A FULL-SIZED BOTTLE SENT FREE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

RIO CHEMICAL CO., - - NEW YORK.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., FEBRUARY, 1903. No. 2

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

Subscription $1.00 per year, in advance.
Subscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
Receipts. The receipt of all money is immediately acknowledged.
Important Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it continued expecting to receive a remittance at their earliest convenience.
We Notify all subscribers when their paid subscription expires.

EDITORIAL.

WHAT CAN BE DONE TO LESSEN THE MORTALITY OF CARCINOMA UTERI?

Dr. E. E. Montgomery, of Philadelphia, read a paper upon this subject before the Delaware County Medical Society. It is a depressing subject, and in calling attention to the great advances made in other lines of medicine during the last decade, the writer says, and says too truly, that in spite of all our boasted progress, there is one form of disease before which we must humbly stand with bowed heads and often see its victim wrested from our helpless hands.

Dr. Montgomery indulges in the hope that at some time a microbic origin of uterine carcinoma will yet be discovered. This is a question for the future; however, the practical experiences of the present time places our greatest hope in the field of prevention. He is a believer in the doctrine promulgated long ago by Emmet, that neglected lesions of parturition are the most prolific cause for the development of this disease. When found in women who have never borne children, the body of the uterus is most frequently affected. Cases of uterine carcinoma in nulliporous women, however, are rare. This fact in itself goes far to prove that traumatism plays a most important part in the causation of the disease.

Dr. Montgomery thinks that every parturient woman should be carefully examined at the termination of her convalescence; the lacerations in the cervex of slight extent may safely be left to nature, but those of larger size should be promptly repaired before cicatricial changes occur. Especially should these lesions be repaired when they result in endometritis, swelling, and eversion of the cervical mucus membrane. Examinations once or twice a year are particularly advised at the approach and during the climacteric.

Next to the prevention, the writer regards the early recognition of the disease the most important factor in reducing the mortality rate of uterine cancer. Unfortunately, this is not always easy to do during the early stages of

the malady. The three symptoms usually regarded as the basis of diagnosis, pain, hemorrhage and discharge, occur in other conditions and are not constantly present in cancer. Pain, especially, may be absent even in cases where extensive destruction of tissue has taken place. Hemorrhage should always be regarded as a danger signal, and should lead to a careful examination. The bleeding may be slight and of short duration, and very extensive progress in the disease may take place before the hemorrhage becomes marked. The discharge, of a thin, watery character and a fetid odor, is another danger signal. It results from necrosis of tissue, and may be secondary to any extensive infiltration. It will thus be seen that the disease may have made sufficient progress to render the case beyond the hope of cure before any of these symptoms are pronounced enough to cause the patient to seek the aid of a physician. This fact emphasizes the importance of the preventive measures previously urged. The author believes that physicians are much more prompt now in requiring examination of all suspicious cases than was the custom ten years ago. In this class of cases a physician should, in justice to himself and to his patient, decline to prescribe until he has satisfied himself, by a physical examination, of the character of the trouble. Where the disease begins in the squamous cells of the vaginal portion of the cervex, he does not consider the case entirely hopeless, even when the cervex seems entirely destroyed and there is beginning involvement of the vaginal walls. Where the malady originates in the cylindrical cells of the cervical canal, the course is much more insidious and the chances of cure much less.

Dr. Montgomery prefers the abdominal incision in the majority of cases of hysterectomy for uterine cancer.

POST-OPERATIVE TREATMENT OF ABDOMINAL CASES.

Dr. Jno. B. Deaver writes a very practical article upon this subject in a recent issue of the Philadelphia *Medical Journal.* The plan of post-operation treatment, as described by the author, is that usually followed at the German Hospital in Philadelphia. The point is made that a correct management after operation is as important as the operation itself. His statement that shock is seldom seen except in cases of profuse hemorrhage, as in ruptured extrauterine pregnancy, etc., is a pleasing one, and he attributes the absence of this element of danger in his work to the fact that the operation is performed as rapidly as is consistent with thoroughness, and the patient is not saturated with ether. Where shock is feared or actually present, he uses strychnin, atropine, whiskey and camphorated oil hypodermically; external heat and hot saline solution in the bowel. In severe shock, he much prefers the intravenous transfusion of salt solution, to its use subcutaneously, which he terms slow, cumbersome and painful. The use of these stimulants generally results in recovery from shock due to severe hemorrhage, but he has found no treatment of much avail in those cases of acute appendiceal abscess with absorption of septic products, the symptoms of which closely resemble true shock.

In clear cases of abdominal section, the patient is kept on the back from 12 to 48 hours, depending upon the length of the incision. When gauze drainage is employed, the patient is slowly turned, by means of supporting pillows, to one side at the end of 72 hours. In

uncomplicated cases he is an adherent of the maxim, "let the patient get well," and practically no medicament is employed. No water is given, as a rule, for 18 hours, or longer if nausea persists. He has not found that the use of water by rectum affords any relief to the thirst, of which most patients complain bitterly. The use of morphine for the relief of pain is strongly condemned, and a change in posture for the purpose of relieving the severe backache, which is so often present, is considered far preferable to a resort to anodynes. The same holds true of the abdominal pains caused by flatus. If at the end of 18 hours no flatus has been passed, an enema of milk of asafoetida is given, diluted with water. If this fails to cause an expulsion of the gas, ice bags are applied to the abdomen and a high injection of turpentine, glycerine and magnesia sulphate, in the proportion of one, two and three, is given. On the third or fourth day the bowels are moved by a plain enema, or a glass of citrate of magnesia. Dr. Deaver does not believe in the small doses of calomel, which so many operators use for this purpose.

Nourishment is given 24 hours after the operation, in the shape of milk and lime water in small amounts every hour, and the amount is rapidly increased if well borne. This diet is added to after the third day. The temperature should drop to normal after the bowels have moved on the third or fourth day. In clean cases, if the temperature persists beyond the period, a search is made for a stitch abscess. Otherwise the wound is not dressed until the eighth day. In drainage cases, glass tube is removed in two or four days and rubber substituted; gauze drainage is removed in six to twelve days, depending upon the force necessary to remove it. Rubber drainage is then substituted.

The most frequent post-operative symptoms in abdominal cases that calls for relief is the nausea and vomiting. This is often quite severe, arises from several causes, and is a source of much misery to the patient. In the management of this troublesome operative sequel, the author is enthusiastic in his praise of lavage of the stomach. He has tried it in all cases where the vomiting could not be controlled by ordinary measures, whether it was due to the anaesthetic, temporary paresis of the bowels, or in beginning peritonitis. In some of these latter cases, with frequent vomiting of black material, he thinks life has actually been saved by washing out the stomach. After irrigating the stomach, salts or other medicines can easily be introduced and retained, that otherwise would be promptly ejected. The frequency of the lavage, of course, depends upon the severity and persistence of the vomiting, but Dr. Deaver states that in several cases the irrigation has been performed every three to six hours for two days.

EDITORIAL SELECTIONS.

THE WORK OF LORENZ.

The unfortunate way in which the daily press are accustomed to deal with matters medical has been exemplified in the treatment accorded the visit of a distinguished Austrian surgeon. Professor Lorenz has not at home won more than ordinary distinction as an orthopedic surgeon. The so-called bloodless method of reducing congenital

hip-joint dislocation was not original with him, although he may justly claim to have made a large section of the medical profession familiar with its advantages. That it is the only method of treating this deformity, or that it is a suitable operation for many cases, is obviously untrue. The harmlessness of the operation is also not such as might be surmised from newspaper accounts of it. The chloroform fatalities in the cases Lorenz has himself reported are much in excess of ordinary numbers, and it is stated on reliable authority that out of the few cases operated upon by Dr. Lorenz in this country a goodly proportion exhibit unfortunate effects, which indicate the severity and violence of the methods employed.

Nevertheless, Lorenz is a great man; he has done much for orthopedic surgery, and the meagre fees he carries back with him to Europe form an entirely insubstantial reward for his great accomplishments.

Dr. Lorenz will in future years find the newspaper accounts of his visit interesting reading, and deducting therefrom the hysterical gush, which must have annoyed and surprised him, he will find that his visit was appreciated, and was productive of increased interest in the important field of orthopedics, in which he is such an illustrious worker.—*Med. Age.*

THE CORROSIVE SUBLIMATE DOUCHE.

In spite of the fact that several writers have called attention to the danger of the corrosive sublimate vaginal douche, many physicians still persist in its use as a routine measure, and probably will continue to do so until a severe or fatal case of poisoning comes under their personal observation.

In the December 27th (1902) issue of *American Medicine,* Dr. Horatio C. Wood, Jr., of Philadelphia, reports a case of corrosive sublimate poisoning from a vaginal douche, which recently came under his observation. In this case the patient suffered from leucorrhea. She visited a dispensary and was ordered a daily douche of corrosive sublimate of the strength of 1 to 2,000. The injections caused so much pain that, fearing a mistake, she returned the next day to the dispensary and was told that the pain was due to an improper syringe. She bought a new one, and again tried the injection, with like result. On again consulting the dispensary, she was told to use a douche of half the concentration. At this visit she called the attention of the doctor to her urine, which she said had become the color of blood after the first injection. She was informed that she had severe kidney disease, although the doctor apparently failed to recognize the cause. After a severe attack of acute nephritis, she recovered under appropriate treatment.

In 1891, Sebillotte collected and published the records of 148 cases of corrosive sublimate poisoning following the use of the vaginal douche in lying-in women. Thirty of these ended fatally. In the fatal cases, the strength of the solution was 1 to 1,000 or over in ten instances; 1 to 1,500 in two, and 1 to 2,000 in the remainder. The absorption of the poison, the writer thought, probably took place in the uterus at the site of the placenta. The symptoms observed were profuse diarrhea with tympanites, vomiting, stomatitis, renal complications, pulmonary congestion, bronchitis and broncho-pneumonia; later on circulatory disturbances, torpor, prostration and collapse. The skin was either dry, or covered with cold perspiration; there was itching, which often

preceded death. Various skin eruptions were also observed.

The writer concluded his article by stating that the corrosive sublimate douche must be used with "science and prudence in confinements, and that it is dangerous in inexperienced hands."—*The Med. Ex. Pract.*

THE PROFESSIONAL SPIRIT.

Very few of us probably ever really give any very serious thought to what constitutes the difference between the professions as such and the other means of getting a livelihood. That there is a certain social distinction made, we are all aware, but it might puzzle some of us to give an adequate accounting for its existence. This distinction is not in externals, though they have their effect. Perhaps most of us would first assume that it is based on the educational culture that the professions are supposed to require of their members. This has also, beyond question, its influence in creating the popular distinction, but it alone does not account for it altogether. We have had learned blacksmiths, stonemasons and shoemakers, but no one included them among professional men so long as they followed their occupation. Mere learning does not inspire popular respect to more than a very limited extent; there must be something more. Not all professional men are respected or respectable, but there is certainly a sort of prestige that exists of the professions as such.

Perhaps the best explanation, at least as regards the profession of medicine, is that given in a recent address by Professor Smart, of the University of Glasgow, which seems to us to contain some ideas that are well worthy of our consideration. He asks what differentiates the professions from the trades, and answers his question by quoting Ruskin, who "with all his extravagences saw right through to the heart of things." Ruskin asked why the common consent of mankind gives the precedence to the soldier over the merchant, and gave as the reason that the former held his life at the service of the State. We know that "put him in a fortress breach, with all the pleasures of the world behind him and only death and duty in front of him, he will keep his face to the front." It is the same with the true professional man, and more than all with the physician, who, like the soldier, but much more constantly, risks life and health for others' sake. It is not in this, however, that we are to find the true secret of the professional spirit and the reason of the honor in which it is held. There are plenty of men who risk life daily for a wage, and who think of nothing higher. The mere risk of the occupation is a secondary matter; the real distinction is, as Smart says, the putting of the work before the wage. There are, as he says, many physicians who will disclaim this; who will say that they do their work for the pay, but it is a poor-spirited physician and also an exceptional one whose practice coincides with this, whatever may be his professed theory. The professional spirit influences conduct even of those who would disavow it; professional pride and self-respect make the interests of the patients superior to one's individual interests and convenience. The Code of Ethics is only a formulated statement of the principles that unconsciously influence every medical practitioner worthy of the name. The public, therefore, puts confidence in the physician and regards him in a very different light from the tradesman and mere wage earner, whose business morals have personal interest as the chief good. Of course, there are many exceptions,

tradesmen and mechanics and others who put their conscience into their work, and these, too, have the true professional spirit, but they do not to the public represent their class or earn for it the regard that is given to the professional man.

It does not follow that we should neglect our interests—the laborer in these fields as in others is worthy of his hire—but we must keep ourselves clear of the taint of commercialism, the spirit that makes the tradesman's motto, at least too often *"caveat emptor"*—let the buyer look out for himself. With us the word should be, as Smart suggests, *"caveat venditor"*—let us see first that we do good service for our wage. In times like these, with the present tendencies of labor agitations on the one hand and of combinations and trusts on the other, it is especially needful that we should keep up and live up to our best traditions and continue to earn the honorable estimation that has hereto fore been given us.—*Jour. Am. Med. Association.*

MISCELLANEOUS.

Preferred Daylight.

A housemaid who had borne the pain of a troublesome tooth for several days, in the hope that by exercising a little more endurance and patience she might avoid the expense of a dental operation, was finally obliged to go to the dentist one evening to have the tooth extracted. The New York *Times* describes the visit:

Being of a thrifty tendency, she inquired of the operator, "How much do you charge for taking out a tooth?"

"Fifty cents; with gas a dollar," was the reply.

"Then I guess I'll call to-morrow and have it taken out by daylight," announced the patient.

A Cardinal's Hat.

Many years ago there was a "scene" in the Vatican and the Roman Catholic *Correspondent,* Paris, tells about it. It was when the aged Cardinal Albani was dean of the sacred college. He had made Pius VI. Pope in spite of the candidate of the house of Bourbon and Cardinal Bernis, to whom he addressed a keen rebuke. Taking his beretta from his head he held it out at arm's length to Cardinal Bernis, who was Madame de Pompadour's protege, and exclaimed: "I would have your eminence know that it was not a courtezan who placed this hat on my head."

Such a Simple Way!

The *Pilgrim* tells the story of a woman property holder in New York whose agent brought her an insurance policy on her house. "You'd better give me a check for the premium now," he said.

"How much is it?" she asked.

"A little more than one hundred dollars. Wait a minute and I will get the exact amount."

"Oh, how tiresome!" said the lady. "And I am in such a hurry! Tell the company to let it stand, and deduct it from what they will owe me when the house burns down."

The Carolina Medical Journal

ROBERT L. GIBBON, M. D., ROBERT D. JEWETT, M. D., W. H. WAKEFIELD, M. D.
Editors and Proprietors.

COLLABORATORS.

H. T. Bahnson, M. D., Salem, N. C.
J. Howell Way, M. D., Waynesville, N. C.
J. Allison Hodges, M D., Richmond, Va.
S. Westry Battle, M. D , Asheville, N. C.
Geo. G. Thomas, M. D., Wilmington, N. C.
J. P. Munroe, M. D., Davidson, N. C.
Manning Simons, M D., Charleston, S. C.
S. C. Baker, M. D , Sumter, S. C.
R. L. Payne, M. D., Norfolk, Va.
H. S. Lott, M. D., Winston, N. C.
J. W. Long, D. D., Salisbury, N. C.
H. A. Royster, M. D , Raleigh, N. C.
Albert Anderson, M. D., Wilson, N. C.
Francis L. Parker, M. D., Charleston, S. C.
Chas. W Kollock, M. D., Charleston, S. C.
Davis Furman, M. D., Greenville, S. C.
F. Julian Carroll, Summerville, S. C.
Translation and Foreign Reviews, Richard H. Whitehead, M. D., Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.

Contributors for the Original Department of The Journal are received, with the understanding that they are contributed exclusively to this Journal.

Illustrations necessary to elucidate the text will be provided without expense to authors when suitable ink drawings or photographs are furnished.

Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

Report of Two Successful Cases of Rectopexy or Suspension of the Rectum Upon the Sacrum.

By S. T. Earle, M. D., Baltimore, Md.

The numberless procedures that have been recommended for prolapse of the rectum suggests their inefficiency, and is my excuse for reporting these two successful cases, done after George R. Fowler's method, and reported in Tuttle's recent work on "Diseases of the Rectum, Anus and Pelvic Colon," hoping thereby to emphasize the importance of this method, and to add that I think we have at last gotten a simple and very satisfactory method of relieving the class of cases of prolapse of the first and second degree, for which this operation has been recommended. For the benefit of those who have not seen Tuttle's recent work, I will give in his own words the method of procedure:

The patient is prepared by thorough cleansing of the intestinal canal, shaving the perineum and sacral region, and applying an antiseptic dressing the night before the contemplated operation. After being anaesthetized, he is placed in the semiprone position on the left side, with the hips elevated on pillows and the thighs well flexed on the abdomen. The prolapse is then dragged down to its full extent and held forward by an assistant. A curved incision about two inches in length is made midway between the coccyx and anus. This is carried through all the tissues into the rectro-rectal space. With the fingers or a dull instrument introduced through this incision, the rectum is separated from the coccyx and sacrum posteriorly as high up as the attachment of the mesorectum, and on the sides as far as the attachment of the lateral ligaments. The latter should be sedulously preserved. The anterior surface of the

bone is then gently curetted to remove all the fatty tissue and freshen it. At this point the assistant reduces the prolapse, and with his fingers inside the

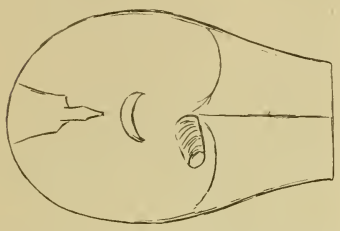


Fig. 231. Rectopexy for Procidentia Recti. The Incision.

gut, inverts and brings it out through the incision; the operator catches the protrusion and drags the gut down as far as it will come, usually a little less than the amount prolapsed through the anus. The external surface of muscular wall of the gut thus exposed is then curetted as was the sacrum. Silkworm gut or silver wire sutures are then passed transversely through the muscular layer, embracing as much of the cir-

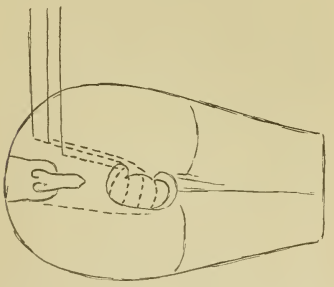


Fig. 233. Rectopexy—The Sutures Out Through the Tissues on Back Side of the Sacrum.

cumference of the gut as possible. They are placed one-half inch apart, and the ends left six to eight inches long. After the sutures have been placed, the ends of the upper ones are each in turn threaded on a long, curved Peaseley's needle, and carried up through the wound to the highest point of separation between the rectum and sacrum, where they are made to penetrate the tissues, and are brought out through the skin on opposite sides of the bone. The other sutures are treated in like manner, each being brought out one-half inch lower than the preceding one. The ends are then drawn taut, and the prolapse is thus dragged up into the hollow of the sacrum, where is belongs. A pad of gauze is laid over the sacrum, and the sutures tied over this to avoid

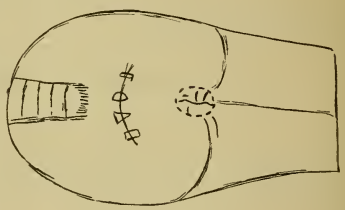


Fig. 234. Rectopexy—The Operation Complete.

their cutting into the skin. Before tying the sutures the space between the rectum and sacrum should be freed from all clots and the oozing checked. The gut is thus anchored in close opposition with the sacrum, to which it unites in due time. The external wound is closed by buried catgut and subcutaneous sutures. If the sphincters are much relaxed or overstretched, a ligature of kangaroo tendon (Fowler) is passed around the anus at the upper margin of the external sphincter, and tied over the index finger introduced through the anus, as has been advised by Platt. This narrows the anal outlet and causes contracture of the muscles, thus contrib-

uting to the cure. The bowels are confined for eight days, when they are moved by enemata. The patient is required to remain in bed and use the bedpan for three weeks, after which time he may be allowed to go to the toilet. The anchoring sutures are left in from ten to fourteen days.

Up to the present writing the operation has been employed by the author in ten cases; three of them have been in old people, five in people of middle age, and two in children. In two of these the procidentia had existed for fifteen and eighteen years respectively. Seven of them remained cured for one to three years. Three have been done less than a year, but so far there has been no recurrence. In the case of a woman of 35 years of age, operated on through the courtesy of Dr. Lusk, several other methods had been tried, and among them the Diffenbach-Roberts operation, which resulted in incontinence and large cicatrices at the posterior commissure of the anus, necessitating a plastic operation to restore the sphincter after the prolapse had been sutured to the sacrum. It has now been eighteen months since the operation was done, and beyond a slight prolapse of the mucous membrane at the anterior commissure, there has been no recurrence.

Case 1. Miss C. P., age 55 years, Maryland General Hospital, March 20, 1901. The following history with regard to her rectal trouble:

About ten years ago, after a long walk, the rectum had come down, and continued to do so, gradually growing worse until five years subsequently, when the slightest walk would cause it to protrude, this condition continuing until she entered the hospital, when I found it continuously protruding for about two inches. After having the bowels well moved by compound licorice powder, followed by high enema, she was prepared for the operation, which was done on the above day. The method of procedure was that first suggested by Dr. George R. Fowler in the New York *Medical News,* February 27, 1897, and subsequently described by Dr. Tuttle in his recent work on "Diseases of the Rectum and Colon." There was no special difficulty encountered in following the directions as given by Tuttle, and the patient did well until about the seventh day, when a small stitch abscess formed in the line of the deep sutures. This necessitated my opening up the wound for drainage, which delayed the healing very much; but without any bad results on the prolapse, which has not recurred, with the exception of a slight knuckle of mucous membrane at the anterior commissure.

Case. 2. G. M. R., Belair, Md., entered the hospital October 15, 1901, suffering from prolapse of the rectum, which came down to the extent of five or six inches after the evacuation of the bowels, and had existed for some years previously. I followed the same line of procedure as in Case 1, with very satisfactory results; union by first intention, and with complete relief from the prolapse. He was discharged from the hospital November 5th, just twenty-one days after the operation. I have kept track of this patient since, and as recently as November 15, 1902, I heard from him, and he reports no recurrence of the prolapse.

Sebaceous Cyst—Ostitis Deformans—Laminectomy.

By William L. Rodman, A. M., M. D. Reported to the Louisville Medico-Chirurgical Society.

Case. 1. The first specimen is a sebaceous cyst removed from the head of one of Louisville's most diistinguished

surgeons and medical teachers, who has carried it for twenty-seven years.

The growth had never caused any trouble to its host until recently, when it became painful and he thought caused headache. He decided, therefore, to have it removed, and the operation was performed before the class at his clinic in the Kentucky School of Medicine Hospital.

There is nothing of especial interest in connection with the case, except that the tumor had been in existence for twenty-seven years, and, as you observe, is quite large.

Although there was great redundancy of skin, none of it was cut away. Rapid shrinking of the skin occurred, and today there is only a linear cicatrix with no evidence of the previous excess. Union *per priman* occurred.

Case 2. I present a skiagraph of the second case, by the courtesy of Dr. Holloway, which shows the lesion perfectly.

The patient was a little girl 8 years of age. The fibula was enlarged from a point two inches above the external melleolus, extending three and a half inches upward, being normal in size above and below the enlargement. Dr. Holloway made the diagnosis of ostitis deformans. The fibula was so large that it pushed the tibia out of the way. A subperiosteal osteotomy was performed in order to straighten the leg, and I believe there will be a reproduction of bone.

The little girl has gotten along without any trouble, and is now going about on crutches.

Case 3. The next specimen has the following history: A man aged 27 years, living in Bernstadt, Kentucky, was shot seven months ago. The bullet entered one and a half inches below the xyphoid cartilage, and that he did not sustain a perforation of the stomach or duodenum was probably because he had fasted for fifteen hours, and the viscera were consequently empty. That the ball passed entirely through the body I had no doubt. It was afterward located by means of the X-ray, and was said to be in the body of the eleventh dorsal vertebra. Numerous examinations were made and several skiagraphs taken of the upper part of the man's body, and the bullet located in the eleventh dorsal vertebra.

Soon after being shot the man became completely paralyzed from his waist down. He had no control over the bladder or bowel, paralysis of both motion and sensation being complete.

He came to Louisville two weeks ago to have the bullet removed. I explained to him the mortality attending the operation itself; that the dangers were enhanced and the possible benefits lessened by the time which had elapsed since receipt of the injury; that the complete paralysis was probably due to compression by the bullet upon the spinal cord; that considerable damage had likely been done the cord by the bullet, etc.; but the ball having been located, he knew it was there, and he insisted upon having it removed.

After the matter had been explained to the patient, as stated, a laminectomy was performed before the class at the Kentucky School of Medicine Hospital three days ago. I found the bullet, which is a 38-calibre, inside the membranes of the cord, at the eleventh dorsal vertebra, where it had been located by the X-ray. You will notice some of the substance of the cord still adheres to the bullet, which is not battered, although it passed through the vertebral column.

The spinous processes were cut with large curved pliers, and the lamina with

mallet and chisel, the Rongeur forseps being used liberally, and no trouble was experienced in exposing the cord to the extent of one and a half inches. I was surprised at the small amount of hemorrhage, all of which came from the plexus of veins back of the spinous processes, and which was easily controled by pressure.

The bone having been removed, the bullet could be felt, and I thought it was in the body of the vertebra pressing upon the cord, but more careful examination revealed that it was in the membranes themselves, so the dura and pia were opened to the extent of two and a half inches in the central line. There was an abundant escape of cerebro-spinal fluid (five or six drams), and the bullet was found in the substance of the cord. Unquestionably part of the cord is deposited on the bullet, as can be seen.

The cord was partially cut in two by the bullet, but I believe some of the nerve fibres were left intact. I did not care to take the chances of making a complete section of the cord by unnecessary manipulation, and after extricating the bullet the membranes were sutured and I hope for return of sensation and motion, the few nerve fibres left behind taking up the action of the cord itself. The dura was closed with a continued catgut suture, and there has been no escape of the cerebro-spinal fluid since the operation.

The man has not improved markedly since the operation, though it is thought sensation extends perhaps six inches lower than before. He has borne the operation perfectly well, and will be able to leave the hospital in a short time.

DISCUSSION.

Dr. A. M. Vance: I happen to have had several cases similar to the second one reported. I do not know what the proper name is for this disease, but there seems to be a proliferation of the bone from periostitis. In two instances I have removed the entire fibula for similar conditions. One of the patients was a negro in whom the fibula was very large and heavy. A subperiosteal operation was performed and there was some reproduction of bone afterward. A similar result was obtained in the other case, the entire fibula being removed. Another case which I treated was operated upon by Dr. Cowling. It illustrated the difficulty of removing the whole fibula without destroying the nerve, in which event paralysis of the flexors ensues.

Dr. H. H. Grant: The condition in Case 2 appears to be an inflammatory deposit. I cannot class it among those cases known as ostitis deformans, as this term is usually applied. It is an inflammation of the periosteum with a deposit between the periosteum and the bone, greatly increasing the size of the latter.

The last case reported is of interest, and two points occur to me:

1. It illustrates what serious injury may be inflicted in this region without a fatal result, and suggests that great care should be taken in making a prognosis; further, that operative treatment should not be undertaken without explaining the dangers and probable results to the patient.

2. We find here complete paralysis produced by a bullet in the spinal column. It might have been that pressure of the bullet, without injury to the spinal column, might have produced all these symptoms (though it does not appear to have been so in this case), and operation might have satisfactorily relieved the pressure and restored the patient. After this length of time little

is to be hoped for from relief of pressure, but early operation might have been hopeful had the cord not been partially severed. We know that if the cord had been completely divided, the case would have been hopeless under any circumstances. From the location of this bullet we might naturally expect to have great pressure upon the cord, and paralysis as a result, and it would seem to me that an early operation would have promised more satisfactory results.

Dr. J. M. Mathews: The last case suggests the great utility of the X-ray in surgery. We all remember the case of the lamented President Garfield. The bullet in his case could probably have been located, as was done in the case reported tonight, by means of the X-ray, and perhaps some of these patients will hereafter recover by the rational application of surgery under the methods of location, which we now possess.

Dr. Jas. B. Bullitt: The article written recently by Richardson on this subject is deserving of attention, as the time is not far distant when the X-ray will be a part of the armamentarium of the surgeon, and it will be expected that he will at least be in position to make skiagraphs to determine matters of this kind.

Dr. S. Manly: It is unfortunate that Dr. Rodman did not see the case of spinal injury earlier. This recalls a case occurring in my own practice: A man was shot to the right of the spinal column, the bullet passing through the hip bone. Immediately following the injury, he had paralysis of sensation of the buttocks, scrotum, extending down the legs; also of the bladder and rectum. Owing to the imperfect development of the X-ray at that time, the bullet in the bony basin of the lower pelvis was not shown. Nearly all the symptoms have subsided, but the bullet has never been removed.

Dr. W. L. Rodman: I expect to do another laminectomy this week for fracture, and instead of chiseling through the lamina piece-meal, as was done in the case reported, I shall cut out the lamina close to the articular processes on either side with chisel and mallet, and then attack the spinous processes, using that as a lever and pulling them out, instead of cutting them out piece-meal, as all the books advise. While I have read a great deal on the subject, I have not seen this method suggested. I think it is better to grasp the spinous process with strong forceps, detach the lamina, and bring it up in one piece.

SELECTED PAPERS.

Serum Thearpy in Laryngeal Diphtheria.*

By Adolph O. Pfingst, M. D.

It has not been long since membranous croup and diphtheria were considered separate and distinct diseases. Even after the discovery of the diphtheria bacillus by Kelebs in 1884, its subsequent isolation and cultivation by Loeffler, and the observation that it is present in the exudation of diphtheria and membranous croup alike, only a small portion of the medical profession adopted the view that these two conditions are identical.

Certainly with so vast a difference in

*Read before the Kentucky State Medical Society, Paducah, Ky.

their clinical course, it was hard even for the most sanguine investigators to adopt at once the idea of a unity of the infectious element, and much skepticism existed regarding the bacteriological diagnosis. However, since the advent of the serum therapy and its more general employment various manifestations of diphtheria have been recognized, and the membranous croup of the older writers is now generally designated "laryangeal diphtheria." It is in this primary laryngeal form of diphtheria, until recently the most dreaded and fatal of the affections of childhood, that antitoxine has achieved its greatest success; but also in the faucial variety, with secondary laryngeal invasion, has the serum treatment been of inestimable value.

Although it is my purpose to-day more especially to point out the influence of antitoxin in laryngeal diphtheria, I will ask you to bear with me for a brief resume of some important statistics bearing on diphtheria in general. By applying to the health boards of the larger cities of the United States, Canada, and England, I have, through the kindness of the health officers, obtained some valuable and interesting figures. German statistics are taken from hospital reports. It is to be noted that without an exception the decrease in the death-rate began soon after the introduction of the serum therapy, and that it has continued steadily. I will not cite all of the figures at my command, but will confine myself to those most complete.

The greatest reduction in the death-rate after the introduction of antitoxin is reported from Chicago. From an annual mortality rate of 41.96 per cent. of cases in the period of five years before the use of serum treatment, the death-rate was reduced to 6.79 per cent. in the five following years, during which 5,727 cases were treated with antitoxin. The least reduction was recorded in Glasgow, Scotland, where diphtheria is comparatively a rare disease. In the last six years of the pre-antitoxin period 42.2 per cent. of cases of diphtheria died; in the six subsequent years the death-rate in 1,212 cases reported was 21.6 per cent. In Sheffield, England, the best year since the antitoxin has been in use (1901) gives a death-rate of 15.96 per cent. Dr. John Robertson, the medical health officer of Sheffield, has in a personal letter expressed the belief that the less favorable results in England from the serum therapy can be attributed largely to a certain timidity on the part of the profession of England in adopting the new treatment. He stated that the treatment was not adopted in Sheffield until 1897, and that since then the mortality rate, which had ranged from 35 to 43.5 per cent., has gradually been reduced until in the last year it was only 15.96 per cent. in 1,596 cases. This, however, included all cases, irrespective of the manner of treatment, and as antitoxin had been administered in but 45 per cent. of the cases, it is in fair proportion to our American records. In Edinburg the mortality rate for 1901 of over 1,000 cases was 18 per cent.; manner of treatment not specified. Briefly glancing at the reports of several American cities, we find St. Louis with a death-rate of 35.46 per cent. for the six years before the antitoxin period, and of 15.76 per cent. for the six following years. Of the latter, which included 13,593 cases, 2,347 were given antitoxin and only 8.75 per cent. of these died, though the majority of the cases were among the poor and imperfectly fed, many of whom were of low vitality. Similar records from Newark, N. J., give a

mortality of 15.4 per cent. of all cases, 7,157 in number, in six years of antitoxin treatment, and less than 9 per cent. in those treated with antitoxin. The figures from the Health Board of New York City correspond with the foregoing. The mortality rate for five years prior to the use of antitoxin was 28.03 per cent.; for the same period since then, including 62,902 cases, 14.32 per cent.

To judge accurately and intelligently of the real value of the serum therapy, a comparison should be made of the cases treated with and without it. Most health boards have been unable to obtain such reports. Boston, for instance, gives an average mortality of 10.5 per cent. of 10,001 cases, and Buffalo 17.5 per cent. of 5,830 cases reported in the last six years; Washington 11.85 per cent. of 675 cases, Baltimore 8.8 per cent. of over 1,000 cases, Minneapolis 10.2 per cent. of 1,863 cases, and San Francisco 12.74 per cent. of 383 cases for the last year. All cases were included in these reports without reference to any special treatment. In Washington record was kept by the health board of the manner of treatment for seven months. But 3.8 per cent of the 211 cases treated with antitoxin died, while the death-rate in the 190 children treated by other means was 34.2 per cent. In Newark 4,283 cases were treated with antioxin, with a death rate of 10.02 per cent.; 2,904 were treated without it, with a death-rate of 20.35 per cent. In all of these cities the mortality in the pre-antitoxin period ranged from 28.5 to 42 per cent. Dr. M. K. Allen has recently made a careful investigation of 402 cases reported in Louisville in four months of last year, the results of which he published in the April issue of *The American Practitioner and News.* Antioxin was used in all but 59 cases, with a death-rate of 6.8 per cent. In the cases not treated with antitoxin the mortality rate was 22 per cent. In Germany, summary of over 100,000 cases gathered by Dr. F. Seigert from reports of all the leading hospitals of that country show an average mortality of 41.5 per cent. in the four years previous to the employment of antitoxin, and an average of 16.4 per cent. in the four subsequent years. As the mild cases are not often sent to the hospitals, these figures include mostly severe cases.

In the compilation of the various statistics to prove the value of antitoxin treatment, the fact must be kept in mind that many of the cases reported as diphtheria in recent years were formerly classified as follicular tonsillitis. This is evidenced by an increase in the number of diphtheria cases reported to most of the health boards in the last six to eight years. Illustrative of this point, I quote from the Buffalo record as follows: "The fact was established that a large majority of cases previously considered as non-infectious tonsillitis were due to the diphtheria bacillus." From the Chicago report I took the following: "Frequently, while clinical symptoms do not yet point to diphtheria, the microscope will reveal the presence of the diphtheria bacillus, whereupon antitoxin is at once administered."

The more the pseudo diphtheria bacillus is studied the more convincing are the results that it is the same as the Klebs-Loeffler bacillus. Its morphological and cultural characteristics are the same, the only difference between the two being the absence of the poisonous by-product in the pseudo bacillus. Knowing this, too much reliance should not be placed in the bacteriological diagnosis of diphtheria, especially in the rapid diagnosis in 24 to 26 hours.

The presence of the pseudo membrane should be recognized as the most important symptom of diphtheria. However, we know also that occasionally there may be a pronounced pseudo membrane without the presence of the diphtheria bacillus. These cases, which are often met with during the common infectious diseases of childhood, are due to an infection of the pyogenic cocci. They run the same clinical course as the others, but fail to respond to diphtheria antitoxin treatment. I believe that the results of diphtheria treatment would be still better were it not for these cases, in which we have to deal with complications of the staphylococcus and the streptococcus. We know that in cases of mixed infection there is a tendency to involvement of greater areas, and that the combination of the toxic effect of the diphhteria bacillus with the septic infection is more apt to lead to a fatal termination than a simple infection.

From the latest report of the Public Health Department of San Francisco, I note that for two years, in which complete records were kept, the mortality was 10.6 per cent. in simple diphtheria, while in the cases in which the microscope also revealed staphylococci or streptococci the mortality rate was 16.9 per cent.

In laryngeal diphtheria our main diagnostic guide is the clinical course of the disease, characterized by symptoms referable to the larynx, viz., the characteristic cough, hoarseness, and symptoms of stenosis. These cases can not so easily be mistaken for other conditions; certainly not as frequently as simple tonsillitis and diphtheria are mistaken one for the other. The statistics of laryngeal diphtheria therefore appear to me more convincing than those of the faucial variety. Among the cases reported as faucial or tonsillar diphtheria are included, as we have seen, many cases which formerly went on record as simple tonsillitis. That this accounts partly for the reduction in the mortality of diphtheria is evident, yet it does not make as great a difference as the increase in the number of cases reported would indicate.

In the Boston statistics, where the disease was classified into positive and negative cases, according as a bacteriological diagnosis had been made or not, the death-rate in the former was 9.4 per cent. and in the latter 10.4 per cent. Statistics uniformly show an almost marvelous reduction in the mortality of the laryngeal cases of diphtheria. This disease has in fact been so modified by the serum treatment that it is now almost entirely within our control. Not only has the mortality been lowered, but the necessity of operative interference has been materially lessened. In the pre-antitoxin period about 90 per cent. of laryngeal cases required intubation, compared to 35 per cent. since the introduction of antitoxin.

In considering the advances made in the treatment of diphtheria in the last ten years, the relief of laryngeal stenosis through intubation should be accredited with part of the success in the management of this disease. In many neglected cases not seen by the physician until the larynx is involved, and also in primary laryngeal cases, intubation often becomes necessary to relieve the stenosis and to avert impending death until the effect of the antitoxin can be obtained. O'Dwyer introduced this brilliant surgical procedure in 1885, but its employment did not become general for several years; in fact, the European physicians have only in the last few years been taking it up, and even now there is a preponderance of trach-

eotomy over intubation. After the value of intubation became recognized the mortality in "membranous croup" was lowered from 90 to about 65 per cent. Since intubation has been supplemented by antitoxin the death-rate has been so lowered that the former per cent. of recoveries—10 to 15 per cent.—now almost represents the death-rate. As a consequence, statistics no longer note the number of recoveries, as heretofore, but now record the percentage of deaths. A remedy with such results may almost be considered specific, and we can not fail to see in it one of the greatest contributions to medical science and a triumph for bacteriological research. The antagonists of the serum therapy, of which there were many, have diminished rapidly, until to-day it is practiced almost universally. In most of the health reports the mortality in the laryngeal cases is still over 20 per cent., St. Louis showing a mortality rate of 28.26 per cent. in 322 cases, and the last report of the American Pediatric Society 27.2 per cent. in 1,704 cases. Private statistics of such reliable men as Rosenthal, of Philadelphia, Shurley, of Detroit, and others, show much better results, the former 13 1-3 per cent of 100 cases, the latter 16.1 per cent. of over 100 cases.

I believe the high rate of mortality in the laryngeal cases can be attributed principally to the fact that many of these cases are neglected until after stenosis has taken place and the children have lost their power of resistance. This is especially true in the primary laryngeal affections. The only children whom I lost of diphtheria in the last year were three cases of this kind, all of whom were in a moribund condition when first seen. Only one of these revived sufficiently after the intubation to be given an opportunity for a second dose of antitoxin. The disease had run on for eight days before being seen by a physician, and although entirely relieved of stenosis by the tube, death resulted in twenty-four hours from general exhaustion.

Another case similar to this one is worthy of a brief report, as it illustrates the value of intubation in connection with serum therapy. In August, 1901, a girl of five years was seen in consultation. The child had been sick with a cold, as the mother said, for six days, which had just in the last few hours extended to the lungs. When the attending physician saw the child all evidences of laryngeal diphtheria were present, and he urged an immediate operation. When I saw the patient there were evidences of diphtheria on both tonsils. She was breathing with great difficulty, retraction of the suprasternal region and ribs being marked on inspiration. The face was cyanotic. As soon as the tube was inserted she became easy, the cyanosis disappeared, and after an injection of 2,000 units antitoxin, she passed into an easy sleep, which lasted for four hours. As the faucial membrane showed no change, in ten hours, I repeated the injection of 2,000 units antitoxin; in the meanwhile stimulation with whiskey and strychnine were resorted to. Five hours after the second injection breathing suddenly became obstructed and the child again became cyanosed. Removal of the tube revealed partial plugging of its lumen. A few moments later the child, in a paroxyism of coughing, expectorated bronchial casts of the diphtheretic membrane. Although breathing seemed easy, the tube was reinserted. This child made a good recovery, the tube being removed on the fifth day.

In the matter of dosage, I am guided by the recommendation of the commit-

tee of the American Pediatric Society, which investigated the subject of diphtheria and antitoxin treatment. I quote from the report as follows: "All cases of laryngeal diphtheria, the patient being two years old or over, should receive: first dose, 2,000 units at the earliest possible moment; second dose, 2,000 units twelve to eighteen hours after the first dose if there is no improvement in the symptoms; third dose, 2,000 units twenty-four hours after the second dose if there is no improvement in the symptoms. Patients under two years of age should receive 1,000 to 1,500 units, the doses to be repeated as above."

The tendency in the last year has been to give larger doses, some going to such extremes as to give 40,000 to 60,000 units in twenty-four hours. While I have myself frequently given injections of 3,000 to 4,000 units in children under seven or eight years, I believe that it is of greater importance to repeat the dose at shorter intervals than to give larger doses. It is bad policy to procrastinate with the repetition of the doses if improvement is not noticed in about ten hours.

One of the greatest obstacles to the success of the antitoxin in the beginning was the opposition of the laity to its use and a certain amount of timidity on the part of the physician in persisting in its employment. Although this has been overcome as the people have gradually become educated up to the good of the remedy, I believe there is still much laxity in regard to a repetition of the dose, partly on account of the additional expense each injection incurs and partly on account of insufficient faith of the physician in the efficacy of a second dose.

There has been so much written about the preparation of the diphtheritic serum, the computation of its units, strength, and manner of its employment, that these details are familiar to every physician. The point of greatest obscurity to-day in connection with diphtheria is the difference between individuals in their susceptibility to the disease. Neisser, Wasserman and others have shown that the blood of the majority of individuals, including those who never had diphtheria, contains a certain amount of antitoxin, which protects the body to a greater or less extent against the invasion of the diphtheria bacillus. As the blood of the new-born is free of antitoxin, this immunity is believed to be an acquired condition, either naturally or artificially. It increases with the age of the individual, which accounts for the lessened susceptibility or almost complete immunity in adult life.

It is now the concensus of opinion among bacteriologists that the so-called pseudo diphtheria bacillus is identical with the Klebs-Loeffler bacillus. Behring (*Bibliothek von Keller, Bd.* 2) has recently advocated a new theory regarding the natural acquisitions of immunity to diphtheria, in that the pseudo diphtheria bacillus, or rather the non-virulent Klebs-Loffler bacillus, while residing on the mucous membrane, not only produces toxines but also antitoxin in certain proportions. He believes that the non-virulent bacillus, which is universally distributed and may be harbored on the mucous membrane of any individual, is continually producing antitoxin, which finds its way into the circulation. By this continuous action, and the absorption of bacterial products, an insusceptibility results which is more prolonged or continuous than the immunity following an attack of diphtheria. The latter, though more absolute, has a limited time.

Contrary to most infectious diseases, the period of immunity following an attack of diphtheria is very short, the protecting bodies being rapidly eliminated from the system. It has been variously placed at twelve weeks. Relative to this question Professor Karl Fraenkel, of Halle, in a recent letter, states that immunity after an attack of diphtheria, and also after the injection of antitoxin, lasts from four to six weeks. The immunity artificially acquired through the introduction of antitoxin into the system can, by increasing the serum according to demand, be made more absolute though not more lasting than the natural form. It is now the accepted view that antitoxin acts by stimulating the tissue cells, establishing in them a tolerance of the toxines. Although it has this same action at all stages of the disease, its therapeutic value is greatest at its onset. Statistics show that the lowest death-rate in diphtheria occurred in those children who were injected on the first day of the disease, and that with every day of delay there was an increase in the mortality rate.

Very excellent results have also been reported from antitoxin as a preventive measure. Behring reported one hundred thousand cases in which the serum treatment was employed as a preventive in which only ten cases of diphtheria developed, although many of the children had been exposed to the infection. The New York State Board of Health has on record one hundred and sixty thousand cases in which antitoxin was used as a prophylactic measure, among whom seventy-nine cases of diphtheria developed, mostly of a mild type. This observation has led to the adoption of prophylactic injections as a precautionary measure in many hospitals and orphan asylums during the prevalence of epidemics of diphtheria. After the disease has developed, the cells are weakened by the prolonged toxic action and cease to respond with the same activity to the action of the antitoxin. Notwithstanding this, statistics show that even in neglected cases, when injected late, the mortality has been lowered by the use of the serum therapy. In doubtful cases, I believe it is poor policy to postpone treatment in order to be able to confirm diagnosis. Treatment should be resorted to at once, as the observation of the leading authorities on diphtheria has been that the serum is innocuous, even when used in large doses.

Post-diphtheritic paralysis, edema of the joints, albuminuria, and sequelae of diphtheria have, especially by the laity, been attributed to the remedy employed instead of to the diphtheritic poison. It may be that the absolute number of cases of post-diphtheritic paralysis is greater than formerly, but this can easily be accounted for in the greater number of recoveries than formerly. Relative to this point, McFarland very correctly says that "paralysis following the use of antitoxin are due to the agent only in so far as it saves the patient from death."

The health boards of our larger cities have in the last years prepared their own antidiphtheritic serum for distribution among the poor, otherwise we obtain it of the large manufacturing pharamcists. While I believe that we can not go amiss by employing the products of such firms as Parke, Davis & Co., and Mulford and Stearnes, whose reputations are dependent upon the efficacy of their product, I believe that there should be some standard of excellence, and that all serum dispensed should conform to that standard. Dr. Edward Rosenthal, of Philadelphia, who has done much excellent work in

the study of diphtheria, suggested such a plan to the American Medical Association in 1900. His idea was the appointment of a pharmaceutical committee, which should define a "unit" of antitoxin and give a standard of strength of the toxin at a certain age, stating its maximum and minimum fatal dose.

Before closing, I would add just a word as to other treatment, for I believe that since the employment of antitoxin has become universal other important measures are not given the place that they deserve. A brisk calomel purge to empty the alimentary tract, local antiseptic solutions (Loeffler's and others) in faucial cases, steam inhalations in laryngeal cases, and heart stimulants to meet the indications, are indispensable auxiliaries to the treatment of diphtheria.

Louisville.

The Treatment of an Infected Corneal Wound With Acetozone.

By J. F. Klinedinst, York, Pa., Eye, Ear and Throat Surgeon, York Hospital; Member York County Medical Society, Pennsylvania State Medical Society, American Medical Association.

A machinist, 43 years of age, came to me October 11, 1902, with the following history: The day before he had received a wound of the right cornea by a fragment of emery, which had been removed by a fellow workman, with the aid of a sharp piece of wood. This is a practice quite customary in most of the manufacturing establishments of this city that not infrequently results in a seriously injured eye and an infected wound. The patient stated that during the night the eye began to pain and "water." Upon examination I found it much inflamed, with profuse lacrimation, photophobia and evidence of considerable pain. There was also marked pericorneal hyperemia. In the center of the cornea appeared a round, gray ulcer, about the size of a pin's head, and a faint grayish line extended downward almost to the edge of the cornea. I realized that I had an infected wound to deal with and prescribed a solution of mercuric chloride, 1-5000, to be instilled every hour, and an atropine solution of 1 per cent., to be used every two hours. The eye was protected from light with dark glasses.

Upon the next day the eye was more inflamed than before and more painful. The ulcer had extended, was evidently deeper, and was surrounded by a hazy halo, and its surface was covered with yellowish pus. The anterior chamber contained a small layer of pus, and the faint hazy line, observed the day before, extended to the pus layer. The use of the bichloride solution was suspended, though the atropine instillations were continued, and a solution of acetozone, 1 grain to 2 fluid ounces of water, was ordered with instructions to instill a drop or two every hour.

When the patient returned on the third day of treatment the condition was much improved, the pain was less severe and the appearance of the corneal wound was much better. No pus was found in the wound, which, though hazy, was not so deep, and the pus layer in the anterior chamber was reduced in amount. The use of the acetozone solution was continued at hourly intervals, with the atropine solution three times daily.

On the fourth day the corneal wound was healing, all pain had disappeared, there was no pus in the anterior chamber, the hyperemia had diminished; in fact, there was a general improvement in all the symptoms. The acetozone solution was then instilled at three-hour intervals, and the atropine solution twice daily. From that time the ulcer

healed rapidly and was nearly well in a week; an opacity remains at the site of the injury.

In previous cases of infected corneal wounds caused by the removal of foreign bodies, I have had to contend with corneal abscesses, and cases occurred in which the eye was lost by deep inflammation. Several times I have been really surprised at the manner in which acetozone rapidly controls bacterial infections of the eye, not only in the case I have just described, which represents my first experience with the drug, but in a number of subsequent cases. I am convinced that the ophthalmic surgeon now has, in acetozone, a germicide that is at once safe and more powerful than any other that I know anything about. I find a solution of one grain to two fluid ounces strong enough for use in the eye. It produces a sharp burning pain for a few seconds. Stronger solutions burn more, but do not seem to do any harm.—*Journal of Eye, Ear and Throat Diseases.*

NEWER MATERIA MEDICA.

Coughs and Their Treatment.

By Drs. Alex. DeSoto and C. W. Crimpton, of Wayside Mission Hospital, Seattle, Wash.

An intractable cough!

What condition so persistently tries the patience of every physician?

Careful examination has been made, the diet regulated, and one of the innumerable prescriptions for that ailment selected, but still the cough continues.

Then more investigation, and more careful prescribing; but still after weeks that familiar cough re-echoes through your waiting room, and you wish Mrs. Smith would change her doctor.

No such good fortune attends you, and that cough haunts you as dismal thoughts of phthisis do your patient, until you are almost determined to advise a change of climate.

It is not the object of this paper to go into details regarding the only too well known disadvantages of most of our familiar cough mixtures. Down to that household standby, "cod liver oil in every form," they have proven in the vast majority of instances, discouraging failures.

The above mentioned remedy, which the patient considers proof positive of the doctor's having made a diagnosis of consumption, may invariably be depended upon to derange the digestion at least.

Cod liver oil, once begun, must frequently be continued throughout the entire winter season.

Nor can it be shown that the ingestion of fats and oils into the system, to become oxydized when coming in contact with the oxygen in the lungs, ever does more than raise the local temperatures, by combustion.

Although this may prevent cold in comparatively healthy lung tissue, its therapeutic (?) effect on the inflamed pulmonary structure may be described as positively harmful.

Cough is a symptom—varying in intensity and character according to its cause.

Nor is that cause always situated within the respiratory organs themselves.

Cough is essentially a reflex act depending upon an irritation of the respiratory center.

These sources of irritation may be subdivided as follows:

Dropping of mucous from the posterior nares in chronic catarrh.

Polipi, enlarged uvula or tonsils, defective closure of the glottis, irritations within the larynx from whatsoever cause, malignant or otherwise.

Bronchitis, pneumonia and pleurisy.

Gastric when due to derangements of the stomach.

Cardiac disease, irritation of auditory canal and organic diseases within the abdominal cavity.

From the foregoing causes, it may be readily estimated that to arrive at the exact nature of any given case may not always be an easy matter. Nevertheless, we must relieve the patient, without risk of disturbing either digestive or circulatory systems. Any remedy which will attain this object in a goodly number of cases is indeed a God-send to patient and physician, and in every sense an ideal remedy.

Not until our attention was called to Glyco-Heroin (Smith) did we become acquainted with a remedy which we have used with a most unvarying success in coughs of every description, and in patients of all ages and conditions, without the slightest unfavorable effect.

The points which recommend Gylco-Heroin (Smith) are:

1. Palatability.

2. Economy (3 to 4 oz. being ample for a curse of the average case).

3. Its immediate action, soothing the most trying cases.

4. Its absolute freedom from unpleasant or unfavorable effects.

5. It is not only a palliative, but a curative agent.

6. The Hyoscyamus it contains reaches those trying cases of dry cough due to other causes than simple catarrhal irritation of the respiratory tract.

We are convinced that Glyco-Heroin (Smith) has no competitors in results, its action being almost specific. It will give satisfaction in every case where results may be reasonably expected, and in many cases its beneficial effects go beyond the most sanguine expectations.

The character of the cases coming to the Wayside Mission Hospital for treatment may be imagined when it is remembered that it is essentially a charity institution; that the vast majority of patients come to us after having tried everything else. These are worthy prospectors and miners, broken in health and pocket by exposure and misfortune.

As proof of the above, we submit the following cases:

I.

Dr. McK. Laborer, 22 years. Had typhoid fever, convalescence much impeded by severe coughing spells, frothy white expectorations, irritable stomach. This condition defies all treatment. There was marked dullness at apeces of both lungs to the third intercostal spaces.

Morning temperature normal, respiration 28, pulse 104; evening, temperature 101, respiration 36, pulse 120.

This condition had persisted for nine days, with progressive loss of strength.

Dec. 16th. Glyco-Heroin (Smith), teaspoonful every two hours; morning temperature normal, pulse 104, respiration 28; evening temperature 101, pulse 120, respiration 36.

December 17th. Slight relief to cough, had some sleep; evening temperature 100, pulse 96, respiration 24.

December 18th. Relief marked; evening temperature normal, pulse 80, respiration 20.

December 19th. Expectoration free.

appetite and spirits better, rapid improvement.

December 20th. Improvement continued, sat up about two hours.

January 8th. Dullness and cough gone, spirits and appetite good, gaining flesh rapidly.

January 11th. Discharged cured.

II.

February 19.

Wm. M. Cook, 52 years. Has had severe cough for last three months, due to cold caught in a typhoon on the China sea after three days' exposure to cold and wet. Has hardly any sleep—incessant dry night cough. Glyco-Heroin (Smith) teaspoonful every 2 hours.

February 21st. Immediate relief; has had quite a little sleep.

February 22d. Improvement continued.

February 24th. Slept all night.

February 26th. Has not coughed in 48 hours.

February 28th. No return of cough and discharged cured; is now in charge of the culinary department of hospital.

III.

January 23d. D. A. Coolie, laborer, 48 years. Marked dullness at base of left lung, severe pain and dyspnoea. Temperature 102, pulse 104, respiration 40. There was daily chilliness at 11 a. m., followed by temperature of 103 2-5 to 104. Expectoration muco purulent; emaciated, irritable, and appetite completely lost.

January 26th. Glyco-Heroin (Smith) teaspoonful every two hours.

January 27th. Some relief to cough; other conditions same.

January 28th. Free expectoration; all conditions still unchanged.

January 29th. No morning rise of temperature; evening temperature 102, pulse 96, respiration 32.

January 30th. Seems somewhat better; had a profuse night sweat.

January 31st. Temperature 101, pulse 88, respiration 24. Took considerable nourishment.

February 1st. Temperature normal, pulse 88, respiration 24. Less dullness, no expectoration, cough disappearing.

Spirits vastly improved. Said it was his third attack, and that in each former instance he was in bed 11 and 8 weeks, respectively. Continued to improve, and was discharged February 26th well.

IV.

January 17th.

J. J., laborer, 19. Pneumonia third day; dullness of entire right lung; temperature 103 2-5, pulse 120, respiration 60. Expectoration prune-juice, very restless and thirsty; slight delirium. Glyco-Heroin (Smith) teaspoonful every two hours.

January 18th. Temperature 102, pulse 102, respiration 48; much easier.

January 19th. Temperature 100, pulse 84, respiration 36.

January 20th. Temperature normal, pulse 80, respiration 24.

Expectoration has changed and is feeling much better. Absolutely refused to believe that he had pneumonia. Discharged cured.

V.

November 3d. S. J., a diver, 34 years. Had just been discharged from another hospital where he had been treated for four months for typhoid pneumonia. Had considerable dyspnoea; cough dry, spasmodic at times; slightly frothy expectoration. Temperature normal, pulse 100, respiration 28. Right plural cavity filled to the fourth intercostal space with pleuritic fluid, which could be heard to splash on slight agitation of chest; appetite poor, and is much dispirited. At five sittings three and three-

fourths gallons of fluid were withdrawn by aspiration.

November 6th. Glyco-Heroin (Smith) teaspoonful every three hours, has much relieved the spasmodic cough; conditions in general seem to be improving.

November 11th. Cough has almost disappeared. Continued in this condition to January 14th, when two and one-half quarts of fluid were withdrawn.

February 3rd. Complained of pain under scapula and was given a dry hot air treatment, followed by violent cough, fever 104 1-5, pulse 124, respiration 28. Glyco-Heroin (Smith) every two hours.

February 4th. Had a hemorrhage and was slightly delirious; the general condition unchanged.

February 5th. Cough almost gone; temperature 101 2-5, pulse 82, respiration 21. Is eating some, and feels much better.

Glyco-Heroin (Smith) has always relieved his cough promptly, and I believe he would have been dead but for its soothing influence. While we do not look to the remedy as a cure for Hydrothroax, we appreciate the sedative effect, in which it is superior to *morphine* and harmless.

VI.

January 11th. W. McD., aged 18. Measles thoroughly developed; temperature 103 2-5; violent cough; yellow expectoration; cannot find rest because of the cough. Glyco-Heroin (Smith) teaspoonful every two hours.

January 12th. Cough is much better.

January 13th. Has not coughed all night.

January 18th. Discharged without return of cough. Entire quantity of Glyco-Heroin used was 4 ounces.

VII.

L. G., aged 10 months. January 29th operated upon for rad cure of right inguinal hernia; on February 6th, although doing well in every way, he was seized with violent paroxysms of coughing (probably due to dentition). The stitches threatened to tear out and the operation proved a failure. Glyco-Heroin (Smith) *XV Guttae* every four hours completely controlled the cough in five doses and so saved the case. There were no visible unpleasant effects of any kind whatsoever from the medicine.

VIII.

J. K., aged 22. In hospital one year for tubercular disease in the lumbar region. January 15th was operated on and much diseased tissue removed. He developed a violent cough January 16th, which caused him great pain and bleeding in the wound. Gylco-Heroin was given, two teaspoons every three hours, with splendid effect. Five doses removed the cough entirely.

IX.

Outdoor Cases.—Mrs. T., Depot Matron, had a cough that had defied the treatment of several physicians. It was a dry, hacking cough, and she had had no sleep in five nights. Completely cured by four ounces of Glyco-Heroin (Smith).

Mrs. M. had been to several physicians; her case had been diagnosed as phthisis; she was taking one-half bottle Emulsion of Cod Liver Oil per day. She was also using morphine freely. Four ounces of Glyco-Heroin completely cured her, and she gained at the rate of one pound per day.

Miss E., 17, coughed four months without relief; was immediately relieved by a few doses of Glyco-Heroin (Smith).

Mrs. D., distressing cough and some dullness at base of right lung. Her cough was completely cured by less than one ounce of Glyco-Heroin.

McD., aged 36, policeman. Had been coughing three weeks and was getting worse. Four ounces of Glyco-Heroin completely cured him.

Mr. R., with all symptoms of pneumonia. Temperature 104, pulse 126, respiration 40. Four ounces of Glyco-Heroin completely cured him.

Dropsy and Diuresis.

By T. W. Keown, M. D, Baltimore, Md.

Dropsy, or the transudation of serum into the tissues, is not a disease in itself, but rather a symptom of a disease; it is an effect and not a cause.

In general, the term is interchangeable with several others, such as acites, oedema, anasarca. Each has its own peculiar meaning, yet dropsy practically covers all of them.

The purpose of this paper is chiefly concerned with the treatment of these conditions, the recognition of the cause, and as far as possible, the removal of this important symptom by the best means at our disposal. Oedema is easily recognized as a painless swelling, pale in color, shiny in appearance and pitting on pressure. It refers chiefly to the extremities and may be found on any localized part of the holy. Anasarca is a general oedema of the whole body, while ascites refers to a collection of fluid within the peritoneum. Butler, in his recent book on diagnosis, gives the following underlying causes: (a) Venous obstruction; (b) toxaemic or hydraemic conditions of the blood; (c) effects of inflammation on adjacent circulation; (d) vaso motor disturbances; (e) lymphatic obstruction; (f) idiopathic, or essential oedema, the nature of which is not well understood.

Each of the above can be well understood by the following examples:

Venous obstruction by cardaic disease and thrombosis. Toxaemia by Bright's disease; vaso motor disturbances as in perepheral multiple neuritis; lymphatic obstruction in Hodgkin's disease, and the essential oedema found in feet of soldiers on a long march.

In the treatment of the causes of these many forms of oedema, we are very much limited as far as giving a permanent cure, yet in the cases of venous obstruction, toxaemia and the so-called essential oedema much can be done to render life comfortable to the patient by supporting the heart with tonics, giving a suitable, well borne diuretic and rest to whole body; but in the other forms there is not much that can be done beyond endeavoring to build up the patient by good food, good hygiene and consistent treatment in a general way.

The two great causes which we meet with in these conditions are cardiac and renal disease, and very frequently they are closely allied; whichever one is primary in cause soon has its ally in line. Both are vital causes. The heart does not work well when it is nourished by blood full of toxic material, and kidneys soon develop passive congestion. These conditions are relieved in many ways by many different drugs, cardiac tonics, depressants, diuretics and diaphoretics. Among the best cardiac tonics are digitalis, strychnia and nitroglycerine. Of these, digitalis in the powdered form is to be preferred, since it not only acts on the heart, but also has some diuretic properties. It is best given in half-grain doses about three times a day, combined with rest in bed. The diuretics most in use are the diffusible alkalies, the bitartrate and citrate of potassium, acetate of soda, salts of lithia, caf-

2750 cc., and 2810 cc. The sp. gr. was diminished from 10.18 to 10.12, yet the total solids increased and oedema disappeared, but the albumen persists even yet. This patient is apparently now in good health and has a hearty appetite. The inability to properly curtail the latter probably accounts for the persistence of the albuminuria.

Case 3. A pulmonary tubercular patient, with both lungs involved; some impairment of heart's action. Was given digitalis pulo gr. ss. and agurin gr. v tid. with the result that his oedema disappeared while the drug was continued; increased the urine from 1400 cc. to 1750 cc. and 1900 cc. on the separate collections of 24 hours each. For some reason this patient had a slight tendency to diarrhœa while taking agurin, which stopped on the removal of the drug. In all other respects this patient's condition remained unchanged.

Case 4. A woman, aged 31, single, pleurisy with effusion, was aspirated and removed 2200 cc. of fluid. It filled up again within four days. Was then given agurin gr. v tid. with marked increase of urine. The total quantity before administration was about two pints and after the exhibition of the drug it increased gradually 2½ pints the first day and 3 pints on the fourth day and 3½ pints at the end of a week. These figures were the best I could obtain from the family. The effusion gradually disappeared, but seemed in no way to have been influenced by the diuretic.

From these cases it is noticeable that the urine increased in quantity and in total solids from examinations of 24 hours' elimination. It does not cause any disturbance to digestion, no nausea, no headache. It is a rational duretic, being a combination of sodium acetate and theobromine, both of which have diuretic proportions in themselves.

THERAPEUTIC HINTS.

The Treatment of Nervous Dyspepsia.

It is desirable in all cases belonging to this variety of dyspepsia, according to G. Rankin (*British Medical Journal,* November 29, 1902), to increase the quantity and variety of food as quickly as possible, and it is especially necessary to get the patient to take as much fat in a digestible form as he is able to assimilate. The stomach discomfort depends upon nerve exhaustion, and is only a local manifestation of a constitutional state, which will not benefit from the routine plan of treatment by acid or alkalies. In this, however, as in other forms of indigestion, fermentative processes play a considerable part in the causation of the patient's discomfort, and again, therefore, antiseptics ought to be administered as part of the medication. The drugs which the author has found to be most reliable for affording relief are zinc valerianate and arsenic. The powerful taste of the valerian is best concealed by administration in capsule form, and may be ordered according to this formula: Zinc valerianate, 3 grains; pure carbolic acid, 2 grains; arsenious acid, 1-40 grain; extract of cannabis indica, ¼ grain. One capsule should be taken after food three times a day. When sleep is much broken at night, and especially if gastralgic attacks are the disturbing cause, relief will be afforded by 30 grains of sodium bromide, with 15 grains of antipyrin taken on going to bed. Rest from mental and physical work is imperative,

The Presentation

of the following

VALUABLE FORMULAS

is of interest to every Physician.

PIL. DIGESTIVA

(WARNER)

℞ Pepsin Conc t, 1 gr.
Pv Nuc. Vom. ¼ gr.
Gingerine. 1-16 gr.
Sulphur, ⅛ gr.

VERY EFFECTUAL IN INDIGESTION.

SPECIFY WARNER & CO.

PIL. ARTHROSIA

(WARNER)

℞ Ac. Salicylic.
Ext. Colchicum.
Ext. Phytolacca.
Podophyllin.
Quinine.
Pv. Capsicum.

ANTILITHIC, TONIC, ALTERATIVE. VALUABLE IN THE TREATMENT OF

RHEUMATISM AND GOUT.

PIL. PERISTALTIC

(WARNER)

℞ Aloin, ¼ gr.
Ext. Bellad. ⅛ gr.
Strychnin. 1-60 gr.
Ipecac, 1-16 gr.

MILD, THOUGH EXCEEDINGLY EFFECTIVE IN

CONSTIPATION AND BILIARY DISORDERS.

INGLUVIN

FROM THE LINING MEMBRANE OF THE GIZZARD OF CHICKEN

A Specific in Stomach Troubles and excellent as an adjunct to Calomel administration; it prevents nausea.

SAMPLES AND LITERATURE ON REQUEST.

WM. R. WARNER & CO.

PHARMACEUTICAL SPECIALISTS

PHILADELPHIA NEW YORK CHICAGO NEW ORLEANS

and there is no form of dyspepsia which benefits so much from change of surroundings, a stimulating and sunny climate, cheerful society, massage, and hydrotherapy.—*Med. Age.*

Nocturnal Incontinence of Urine.

The *Journal des Praticiens* for November 8th recommends the addition of antipyrine to Trousseau's recommendation of belladonna. It gives the following formula:

℞ Syrup of belladonna } of each 75 grammes
Syrup of tolu. ..... } (2¼ ounces)
Antipyrine..... 15 grammes (225 grains)

M. A teaspoonful morning and evening. Increase to two teaspoonfuls if the incontinence persists.

Bromide of champhor, ammonium valerinate, and castoreum may be also associated with belladonna:

℞ Extract of belladonna .....
.....0.01 gramme ($\frac{1.5}{100}$ of a grain)
Camphor bromide .. ..
. . .. 0.10 gramme (1½ grain)
Ammonium valerianate } of each 0.05
Castoreum..... } gramme(¾ gr.)

M. For one pill. To be taken at bedtime.

The author has used with great success the fluid extract of rhus aromatica, 15 drops morning and evening, or a dessertspoonful of the following mixture:

℞ Fluid extract of rhus aromatica ...
..... 2.50 grammes (37½ grains)
Ammonium valerianate .....
..... 0.75 grammes (11 grains)
Syrup of mint..150 grammes (5 ounces)

M.

Roussea St. Philippe, of Bordeaux, prefers rhus radicans. It may be prescribed as follows:

℞ Tincture of rhus radicans.....
..... 8 grammes (2 drachms)
Lime glycerophosphate.. .....
Iron glycerophosphate.....
..of each 1.50 grammes (22½ grains)
Syrup of cherries..... .....
.....300 grammes (10 ounces)

M. A dessertspoonful on rising and at bedtime.—*New York Med. Jour.*

Capillary Bronchitis in Children.

The prognosis of capillary bronchitis is dependent to a great extent on the age and state of nutrition of the patient. In children under twenty months it is more grave and may terminate fatally within twenty-four or thirty-six hours. To control the temperature tepid sponging or bathing should be resorted to. Warm mustard baths serve two purposes in this disease: First, to reduce the temperature, and secondly, to modify the state of congestion of the pulmonary circuit by dilating the peripheral capillary vessels. The strength of the mustard bath should be one tablespoonful of mustard to the gallon of water. The bath may be repeated every three or four hours if necessary. It has been recommended to put one tablespoonful of mustard in a quart or half gallon of water and, wringing a towel from this solution, wrap the infant in the towel and allow it to remain there for ten or twenty minutes, when the skin will become reddened. Mustard paste applied to the anterior portions of the chest or posteriorly over the base of the lungs is of undoubted value in relieving the congestion and lessening the difficulty of respiration to some extent. The paste should be made up from one part of mustard to six of flour, and in older infants a comparatively stronger paste may be used. The elimination, respiration and heart's action must be carefully watched and the presence or absence of cyanosis observed. There is, however, great danger in over-stimulation in these cases in the anxiety to relieve the dyspnea.

Small doses of spirits of nitrous ether repeated four or five times in the 24 hours are of service in increasing the renal elimination. To support the respirations small doses of spiritus frumenti or strychnin may be employed,

Do We Really Need It?

Beef, Iron, Cinchona and Brandy go to make it. Any one of these given alone would do good. Consider, then, how much the benefit could be increased by combination!

"The stimulant action of Extractum Carnis has been considered almost equal to that of alcohol, and bulk for bulk, it is certainly much greater. Two-fifths of an ounce of the Extract represents one pound of mutton." W. GILMAN THOMPSON.

"Iron is a food—not a medicine. Of the value of iron in anæmia and chlorosis, there can be no doubt." H. C. WOOD.

"Cinchona is extremely serviceable in atonic dyspepsia, gastric catarrh, adynamia, convalescence, asthma and chronic bronchitis." SAMUEL O. L. POTTER.

"Alcohol is the savings bank of the system. He who eats little and drinks alcohol in moderation retains as much nutrition in his blood and tissues as he who eats more and drinks less." MOLESCHOTT.

It isn't a question of merit—we don't ask, "Is it good for something?"—but rather one of superiority—"Is it better than any other thing?". Every one of us knows the value of Beef, Iron, Cinchona and Brandy; but Colden's Liquid Beef Tonic is worth "all put together." Its powers have been tested and its virtues demonstrated by thirty years of severe clinical experience. It's known too widely now to need further introduction—we wish merely that you renew the acquaintance if forgotten. We provide the profession with two distinct preparations: "Ext. Carnis Fl. Comp. (Colden), Formula No. 1, with Iron; and Formula No. 2, without Iron." Sold by druggists generally.

THE CHARLES N. CRITTENTON CO., Sole Agents for the United States,
Laboratory: 115 and 117 Fulton Street, New York.
Samples sent free, on application, to physicians.

depending on the rapidity of the respirations and the heart's action. For a child of 15 or 20 months the dose of strychina should range from gr. 1-300 (.0002) to gr. 1-200 (.0003), given every four hours.

In order to render the mucous secretion in the capillary bronchi less viscid, and thus aid the little patient to clear the finer air-passages, and at the same time to lower the temperature by increasing elimination, the following combination may be given:

℞ Ammon. carb. . . . gr. viiss-xv		50–1
Liq. ammon. acetatis	ʒi 30	
Aq. destil. q. s.	ʒii 60	

M. Sig.: One teaspoonful every four hours, alternating with the strychnia.

An emetic is sometimes given to advantage when the infant is unable to raise the mucus.

Small doses of calomel should be given in divided doses at the beginning of the attack.

NEWER MATERIA MEDICA—Continued.

The season of colds, hoarseness, croup and la grippe is now at hand. Keep Vapo-Cresolene in mind when treating inflamed air passages.

Aletris Cordial is indicated as a prophylactic remedy against post-partum hemorrhage, uterine weakness, great development of the fetus and of the adnexa, and in those cases in which there is disposition to hemorrhages.

The usefulness of good Hypophosphites in Pulmonary and Strumous affections is generally agreed upon by the profession.

We commend to the notice of our readers the advertisement in this number of "Robinson's Hypophosphites," an elegant and uniformly active preparation; the presence of quinine, strychnine, iron, etc., adding highly to its tonic value.

The Treatment of Influenza and Coughs.

We excerpt the following from the *Toledo Medical Compend* by David E. Bowman, M. D., Toledo, O., Professor of Obstetrics, etc., Toledo Medical College: "The elimination of the toxins is too frequently overlooked in these cases. Formerly, in their efforts to relieve the distressing symptoms, the profession have used remedies which produced stomachic disturbances, arrest of secretions, constipation, etc. I find nothing better to overcome the congested condition, in these cases, than two laxative Antikamnia and Quinine Tablets given every three hours. If needed, follow with a seidlitz powder or other saline draught the next morning, before breakfast. This will hasten peristaltic action and assist in removing, at once, the accumulated fecal matter. Heroin hydrochloride has been so largely used for coughs and respiratory affections that it needs little or no recommendation in this class of cases, but the favorable synergetic action of this drug used with Antikamnia is, I believe, not sufficiently appreciated. Antikamnia and Heroin Tablets will be found useful by every practitioner, particularly during the winter and spring months. The Antikamnia not only adds potency to the respiratory stimulant and expectorant

Vapo-Cresolene

Cures while they sleep.

Whooping Cough, Croup, Asthma, Coughs, Colds, Catarrh, Bronchitis, Grippe.

An antiseptic, antispasmodic and prophylactic, to be vaporized for the treatment of **Whooping Cough, Croup, Bronchitis, Asthma, Diphtheria**, and kindred diseases of the throat and air passages.

It takes time to prove the value of a remedy: CRESOLENE has over twenty years behind it and the assurance of a vigorous and growing demand, besides the personal acknowledgment of many physicians, that it is the best remedy, particularly for **Whooping Cough** and **Croup** ever introduced. The application of CRESOLENE is simplicity itself. The Vaporizer acts from five to six hours without attention. The patient breathes the medicated air of the room. The treatment being by inhalation does away with the necessity of waking the patient, which, in itself, is of sufficient importance to warrant giving it a trial. **CRESOLENE may be used in connection with any other treatment,** and is used with success in the treatment of **Diphtheria, Scarlet Fever** and **Measles.** When used for the two former diseases and Membraneous Croup a tent should be built around the bed. CRESOLENE is a product of coal tar, of much greater antiseptic power than carbolic acid. Send for descriptive booklet, containing physicians' testimonials and price list.

NOTICE.—Physicians will be allowed a liberal discount, express paid on first order and money back if not satisfied.

THE VAPO-CRESOLENE CO., 180 Fulton St., New York.

qualities of the heroin, but it prevents the slight nausea which may at times follow its administration alone."

Dueling.

The league against the duel is growing powerful throughout Europe, writes Filippo Crispolti in the *Nuova Antologia* (Rome). The movement has become international and must in time eradicate from the continent of Europe an evil that disgraces civilization.

Japan proposes to be up with the times. It has recently ordered some X-ray machines in this country to be used in the Tokyo mint on the employes whom it suspects of swallowing newly minted coins and carrying them away in their stomachs. The X-ray will reveal the coins, even though it may not disclose the spots of guilt on the conscience.

Keeley Cure

For Drunkenness and Drug Using.

Please write us. Correspondence confidential.

Our Illustrated Handbook Sent Free On Request.

THE KEELEY INSTITUTE, Dept. B, Greensboro, N.C.

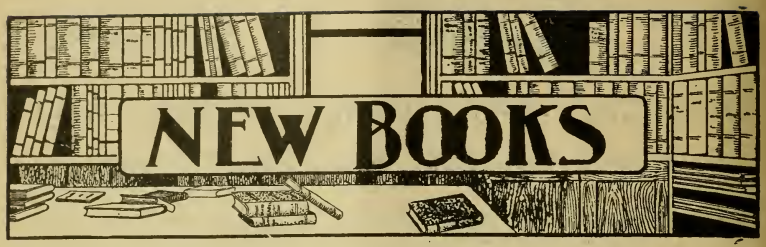
NEURILLA

NERVE CALMATIVE

NERVE HEALTH follows its use.

DOSE: Teaspoonful every half hour until nervousness is abated, then four times a day. Teething Children 10 to 20 drops.

DAD CHEMICAL COMPANY, NEW YORK.



THE TECHNIQUE OF SURGICAL GYNECOLOGY. By Prof. A. H. Goelet, Professor of Gynecology in the New Work School of Clinical Medicine; Consulting Professor in Gynecological Electro-Therapeutics, International School of Correspondence, Scranton, Pa.; Fellow of the New York Academy of Medicine and of the New York Obstetrical Society; Member of the American Medical Association, New York County Medical Association; Fellow of the Societe Francais d'Electro-Therapie, Etc.; 340 Pages, 150 Original Drawings, Bound in Cloth, Printed in white leaf. New York: International Journal of Surgery Co., 1901. Price $2.00.

Leaving out of consideration the element of personal skill, the success of a gynecological operation depends not only upon an accurate acquaintance with the technic, but also upon a thorough knowledge of the many details connected with the preparation of a case for operation and with the after-management.

On all these important points this book affords complete and explicit information. Commencing with the preparation of the patient and of the field of operation, the author describes minutely the preparation of the operator, assistants, nurses, of the operating room, instruments, dressings, etc. Then follow detailed and clear descriptions of each operation illustrated with a profusion of original drawings and photographs which still further elucidate the text. The concluding chapters of the book are devoted to the no less important subject of the after-care of the patient. In view of the fact that this work contains a large amount of valuable information not to be found in the text-books on the diseases of women, it will serve as a practical guide to every one desirous of acquiring a knowledge of the technique of surgical gynecology.

THE DOCTOR'S PART IN PHYSICAL CULTURE.—A wise man, when ill, does not try to cure himself—though he may dearly love to prescribe for the dyspepsias, the colds or the neuralgias of his friends—but seeks the aid of a trusted physician. He feels there is something mysterious in the way medicines act, and fears that in his ignorance he may blunderingly do himself harm rather than good by self-prescribing. But exercise, dieting, bathing — these, he thinks, are so simple that any one can use them without the trouble of consulting a doctor. And here his wisdom forsakes him. The action of these physical remedies is just as complex, just as productive of good when properly

EVERYBODY'S MAGAZINE

will be more fully than ever in 1903 the distinctively bright, virile and wholesome periodical of America. It will be always vitally interesting. It will take hold on human experience with a firm grip. It will show that a magazine may be thrilling without being sensational. *Everybody's* presents strenuous and clean life in every phase, through fact and fiction. It is now, and will be increasingly,

A MAGAZINE OF LIFE.

A mere hint of part of the year's programme is given below:

TRUE STORIES OF IMPORTANT EVENTS. There is always an "inside" to a notable occurrence; and it is almost invariably a story of intense human interest.

The True Story of the Organization of the Steel Trust.

The True Story of How Theodore Roosevelt Became President.

The True Story of the First Railroad Merger.

SIGNIFICANT AUTOBIOGRAPHIES:

The Autobiography of an Insurance Agent, who must know human nature intimately.

The Autobiography of a Bank Cashier, who uses keen insight into the ways of borrowers.

The Autobiography of a Naval Officer, who regards civil life as a lower order of existence.

The Autobiography of a Member of Congress, who reveals many things that are seldom told.

THE BLOWING OF AN OIL BUBBLE. By S. MacREYNOLDS. Exposing the methods of promotion "sharks," who victimize the public with stock in visionary oil wells.

STORIES OF STRENUOUS LIVES. The true stories of men whose personal feats outdo the exploits of heroes of romance.

THE BOHEMIAN MUSICIAN By JAN KUBELIK. The brilliant young violin virtuoso tells the story of his own career.

WORK WITH THE HANDS. By BOOKER T. WASHINGTON, of Tuskegee Institute. This is the most important message of the author to his generation.

STORIES OF WESTERN RIVER LIFE. Mr. G. W. Ogden's stories of life and adventure in the great river steamers which half a century ago plied the Mississippi, the Missouri and the Ohio make a picture of an intensely interesting phase of our national development.

NATURE STUDIES. By Prof. J. M. COULTER, of the University of Chicago; A. R. DUGMORE, H. C. MERWIN and others. Being intimate observations of nature from the scientific, pictorial and nature-loving point of view.

POPE LEO XIII. By F. MARION CRAWFORD, the well-known novelist who is the official biographer of the Pope, and has unusual opportunities for acquiring a knowledge of his career.

NEW YORK THE MOST INTERESTING PLACE IN THE WORLD. A series of illustrated articles explaining the great forces at work which destine New York to be the coming capital of the world.

DRAMATIC EVENTS IN AMERICAN HISTORY. Many of the hill-top events of the greatest emotional and historic interest vividly told by some of the best writers of the day, and profusely illustrated.

The Webster-Hayne Debate.

Critical Days in Great Careers.

The Fall of Richmond.

WOMEN'S SPORTS. By Miss ANNA WHELAN BETTS.

FICTION. *Everybody's Magazine* has secured for the coming year stories by some of the brightest, most original writers of the present day, prominent among whom are the following: MARY E. WILKINS, HOLMAN F. DAY, JUSTUS MILES FORMAN, WILLIAM BULFIN, SYDNEY PORTER, W. R. LIGHTON, and many other old favorites, as well as many new writers who are rapidly forging to the front in the field of literature. Among the stories that will appear during the year are: "The Way of the Wind," by the author of "A Modern Antæus;" "Vashti," by G. M. Baxter; "An Unconvicted Convict," by E. C. McCants; "The Rapier of Perarra, by Atherton Brownell; "The Place of Dragons," by Elia W. Peatie; "The Captain," by Maxamilian Foster; "The Wheel of the Potter," by Herman Whitaker; and "The Needle of the Damned," by Justus Miles Forman.

ONE DOLLAR PER YEAR. TEN CENTS A NUMBER.

JOHN WANAMAKER, Publisher.

See Club Offers on Next Page.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

directed, and just as certain to do harm when wrongly applied, as is the working of drugs in the system.—Dr. Thomas Stedman, in *Everybody's Magazine.*

REVIEW OF MEDICAL AND SURGICAL PROGRESS.

Report of a Case of Acute Septicæmia; Intravenous Injection of Formalin; Recovery.

Dr. C. C. Barrows presented this report. The case occurred in Ward 23, of Bellevue Hospital, during Dr. Polk's absence. The patient was a negress, 26 years of age, and married. She was in labor at the time of her admission, and was having a chill. Her respirations were 30, and there was a fetid, bloody discharge from the vagina. She was delivered the following morning of a macerated foetus, corresponding to about the development of the sixth month of pregnancy. After the delivery of the secundines she was given a douche of a one in ten thousand solution of bichloride. One hour later there was a severe chill, accompanied by a rise of temperature. At 3 a. m. the temperature was 99 degrees F., and at 7 a. m. it was 108 degrees. At 2 p. m. the uterus was irrigated with hydrogen dioxide, followed by two quarts of normal saline solution. A considerable quantity of blood clots and shreds of tissue was removed. She was then transferred to the gynecological service and was curetted. A large quantity of decomposed membranes and placental tissue was removed. She showed at this time marked evidences of sepsis. On the day of admission, a blood examination showed an absence of the malarial plasmodium and of leucocytosis. On December 30th a blood culture, made by Dr. Buxton, showed a pure culture of streptococcus. The urine contained albumin. It was at this time that Dr. Burrows first saw the woman. Her temperature was 108 degrees F., the pulse 160 and over, and the respirations 38. She appeared to be dying. She was at once given 500 c.c. of a 1 to 5,000 aqueous solution of formalin. In three hours her temperature fell to 102 degrees, and in six hours to 101 degrees, and the pulse to 104, and the respirations to 28. After three hours the temperature gradually rose to 103 degrees, and after three hours more it fell to 95 degrees in the rectum. In twelve hours the pulse was 100 and the temperature 102 degrees. The temperature then dropped to normal, and again rapidly rose to 103 degrees. A second infusion of 750 c.c. of the same formalin solution was given. This was followed by a slight chill without a further rise of temperature, and, in the course of 12 hours, the temperature fell to the normal and, with one exception, had practically remained at this point ever since. The patient was now up and around the ward, and appeared to be entirely well. Several blood cultures had been made in this case, but none since the first infusion had shown the presence of any streptococci. Frequent microscopical examinations of the blood had been made, and no change in the blood-corpuscles had been discovered. The albumin had disappeared from the urine.

Commenting upon the case, the speaker said that formaldehyde seemed to him the most reasonable antiseptic agent to inject into the system. At the time of adopting this treatment, in the case just detailed, he had not been

OUR CLUBBING OFFERS.

By special arrangements we are enabled to offer you a number of splendid combinations of yearly subscriptions. The subscriptions may be new or renewal (unless otherwise specified), and may be ordered sent to one or to different addresses.

Publications from Which You May Select.

Class A.	Regular Price.
Woman's Home Companion	$1.00
Cosmopolitan	1.00
Arena	2.50
Good Housekeeping	1.00
American Boy	1.00
Mind	2.00
Pilgrim	1.00
What to Eat	1.00
Table Talk	1.00
Recreation	1.00

Class C.	Regular Price.
Little Folks—new	$1.00
Ladies' World	.40
Motherhood	1.00
Criterion	1.00
The Camera	1.00
American Messenger	.50
Book News	.50

We Offer the Following Clubbing Rates for 1903.

The Carolina Medical Journal, Everybody's Magazine, and any one periodical in Class C $2.00

The Carolina Medical Journal, Everybody's Magazine, and any two periodicals in Class C 2.25

The Carolina Medical Journal, Everybody's Magazine, and any one periodical in Class A 2.25

The Carolina Medical Journal, Everybody's Magazine, and any two periodicals in Class A 2.75

The Carolina Medical Journal, Everybody's Magazine, and any one of Class A and any one of Class C 2.50

A Special Offer—$7.50 for $3.50.

For only $3.50 we can accept your order for a club consisting of the Carolina Medical Journal, Everybody's Magazine, Public Opinion (new), and any *one* of Class A or Class C.

Take Note.—The regular price of Public Opinion alone is $3.00, and it is a splendid weekly magazine which will be appreciated by every American family. Note the bargain we are enabled to offer:

Public Opinion—new sub	$3.00
Arena (Woman's Home Companion)	2.50
Everybody's Magazine	1.00
The Carolina Medical Journal	1.00

$7.50 WORTH. SEND $3.50 AND YOU GET ALL FOR ONE YEAR.

THE CAROLINA MEDICAL JOURNAL.

Charlotte, North Carolina.

When writing Advertisers please mention this Journal.

aware of the scholarly paper published in December, 1900, in the *Lancet* by Dr. R. McGuire; he was only cognizant of the fact that the physician at the Loomis Sanitarium had experimented with this agent in pulmonary tuberculosis. Dr. McGuire concluded that formaldehyde, in a dilution of 1 to 200,000 was a very efficient germicide, and that the maximum strength should be 1 to 2,000, or its equivalent, a 1-to-800 solution of formaline. In the case just reported, every effort had been made to eliminate the personal equation. The whole question rested upon this problem: Can a germicide be injected into the blood which will destroy the streptococcus and not injure the patient? Apparently formalin solution of proper strength was capable of doing this.—*Reported in Medical Record.*

OTHER CASES—ABSTRACT.

Dr. Waitzfelder reported a similar case, the patient, a woman, of 26 years, primipara, came into Gouverneur Hospital on December 28, 1902, with a history of labor and development of sepsis a few days thereafter. She grew steadily worse, and two days later had a dull curettement. On admission temperature was 102.5 degrees F., pulse 120, and respiration 26. On December 29th temperature 103 degrees, and Dec. 30, 105.5 degrees, and on January 1 again rose to 105 degrees. On this date sharp curettement was done and followed by swabbing out uterus with pure carbolic acid and large doses of salines given according to the Lawson Tait method, but she grew steadily worse and, on January 13th temperature was 105.5 degrees and her condition seemed hopeless, when she was given by hypomoclysis 750 c.c. normal saline solution, and within 12 hours temperature fell to 96.25 degrees, but rose on following morning to 103.5 degrees. She was given 500 c.c injection and temperature fell to 102 degrees. On the 17th day of her disease temperature rose to 105.75 degrees, and was given 750 c.c., which was followed by a fall of temperature, but usual reaction occurred next day. On January 15th she was again given 750 c.c. of 1 to 5,000 formalin solution, and in 12 hours temperature fell from 104.5 to 76.75 degrees, and in 12 hours more reacted to 105.5 degrees and remained so for 24 hours. January 17th injection formalin solution 2,500 was given. This was by mistake, and strength intended to have been 1-5000; cyanosis developed after she had received 100 c.c. and she seemed moribund. She was, however, revived and given normal saline solution with exactly the same result as from first formalin solution. Attention was called to the fact that same change in patient's condition took place after injection of saline solution as occurred after use of formalin, and suggestion made that the fall of temperature, etc., were simply due to a dilution of the toxines, or, as Lawson Tait would express it, a "washing out" of the germs. This seems to be all that can be claimed for either solution. Dr. Baner reported a case which occurred in St. Vincent Hospital, of pneumonia in which both streptococci and pneumococci were found, and in which he used the formalin to overcome the streptococci infection of the blood. The case died, and he came to the conclusion that formalin was neither beneficial nor detrimental.

Dr. W. R. Pryor, in the discussion which followed these reports to the New York County Medical Association, brought out the fact that the method of injecting material in the blood had been employed in the New York City Hospital in 1896, the substance experimented with being iodo-

form; the theory being that in contact with serum surfaces the iodoform was decomposed and iodine liberated.

Dr. J. Whitridge Williams, of Johns Hopkins, Baltimore, was invited to continue the discussion, and said that after many years of study he found that remarkable variations and surprises occurred in cases of streptococcus infection, some seemingly hopeless cases recovering after several weeks' illness, without any special treatment. He cited a case in which, after curetting and giving an intra-ulterine douche of normal saline solution, the temperature fell from 107 degrees to 95 degrees. Subsequently numerous streptococci were found in the blood. Had this case been treated by some medicated solution instead of normal salt, the sudden change for the better would have been assigned to this. Hence it is wisest to base deduction not on a single, but many cases.

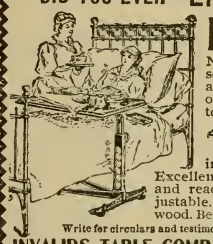
DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

DID YOU EVER ENJOY A MEAL IN BED?



Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient

in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
CLEVELAND, O.

Icterus in Infants.

By Dr. Skormin (Jahrb. f. Kinderh.)

The author distinguishes the following varieties of icterus in infants:

1. Benign icterus neonatorum, which is hepatic in origin, beginning on the second or third day of life and continuing up to the second to fourth week. Therefore, all the cases appearing later or lasting much longer are not benign in character, but distinct diseased conditions which may either be associated with or follow icterus neonatorum. It may also be distinguished by the fact that non-concentrated urine of benign icterus is free from bile-coloring matter, while it is usually present in large quantities in all other varieties of icterus.

2. Icterus septicus forms mostly a predominating symptom of a general infection. In most cases the navel-wound serves as the portal of entry to the infectious matter (staphylococcus pyogenes), which is then carried further by means of the umbilcal vessels. Pathogenetically, the icterus may in part be looked upon as due to a passive congestion; thus, obstruction to the flow of bile resulting from obstruction of minute biliary ducts from swelling of the liver cells or from a catarrhal inflammation. The diagnosis is usually easy. The severe general symptoms, the usually high temperature, eventually the inflammation about the navel and the symptoms owing to the diseased conditions of other organs, indicate the septic origin of the icterus.

3. *Cyanosis afebrilis icterica cum hemoglobinuria* (Winkel's disease), which

LIQUID FEBRISOL

(TILDEN)

DOCTOR: Read this formula, then send for sample and literature. After a trial you will be convinced that Febrisol is the best anti-pain and febrifuge ever offered the medical profession. It is as reliable as morphine; has none of the bad after effects, and is opposed to cardiac depression.

Formula: Each fluid drachm contains chemically pure

Phenacetine	1 gr.
Salol	½ gr.
Cit. Caffeine	½ gr.
Acetanilid	1¼ gr.
Tartaric Acid	¼ gr.
Soda Bicarb.	1½ gr.

Prepared expressly for Physicians' Prescriptions.

THE TILDEN COMPANY,

PHARMACEUTICAL CHEMISTS,

New Lebanon, N. Y. St. Louis, Mo.

was first described by Dr. Winkel in 1879. This disease occurred in endemic form at the maternity of Dresden. It appeared usually on the fourth day. The healthy infants and those born at full term were attacked by cyanosis or icterus, or both. The skin was cold to the touch and temperature per rectum was 37 to 37.5 degrees C.; respiration was accelerated. The blood obtained from the cyanotic spots was black-brown, and syrupy in consistency. The urine showed a brownish discoloration right from the start, due to an admixture of hemoglobin. In its further course convulsions set in, terminating, as a rule, in death.

The etiology of this affection is probably infectious in nature, beginning in the alimentary canal. In two cases reported, the portal of invasion seems to have been the wound after ritual circumcision.

4. Infection. Icterus of the new born starting from the intestinal tract was first observed by French physicians. The disease which affected the children in the first eight days, began sometimes with cyanosis, sometimes with vomiting and slight convulsions, and soon after, diarrhea and icterus set in.

In the course of the attack often cyanosis, slight fever, emaciation, disturbances of the general feeling, sometimes also vomiting and somnolence. Recovery took place within three to thirteen days, or otherwise death. The bacterium coli was looked upon as the infectious agent, which was in large numbers in the stools.

5. Icterus after hemorrhage. Icterus has frequently been observed after hemorrhage. Its pathogenesis consists probably in the fact that the hemoglobin from the blood-extravasation reaches the liver with the blood current, producing pleiochromia there.

6. Icterus catarrhalis is very rarely met in infants. Contrary to older views to the effect that it is a catarrhal swell-

ing of the bile-ducts, the more recent conclusions prevail that it is actually based upon a bacterial infection.

7. Icterus toxicus. The pathogenetic process herein seems to be based upon the assumption that in poisoning the poison dissolves the red blood corpuscles, and this way produces hemoglobinemia, which results in pleiochromia in the liver.

8. Icterus produced by acute atrophy of the liver. The common acute atrophy of the liver is a very rare occurrence in young infants. The pathologico-anatomic alterations consist of considerable atrophy of the liver, abnormal consistency of the same, destruction of a large part of the liver-parenchyma through fatty or granula degeneration of the liver cells. Of the clinical symptoms there is always a more or less intense icterus. At times hematemesis and bloody stools as well as hemorrhages of the navel and skin were observed. The duration of the disease is almost always from 15 to 17 days. It always ended fatally. From a differential point of view, it must be observed that in this condition the navel is normal, the other organs of the body are free from septic disease, and there is no fever.

9. (a) Icterus produced by congenital defect or congenital obliteration of the bile ducts. One variety of this kind consists in a real defect of the large bile ducts, in the other variety a total or partial obliteration of the bile ducts is in question. In both varieties there is hypertrophy of the liver with hypertrophy of the interstitial connective tissue. The icterus is distinguished by marked intensity, continuing so uninterruptedly until exitus. It almost always sets in either immediately or a short time after birth. A second symptom, which is most characteristic of this anomaly, are the acholous stools, which are observed

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to
diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:
8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

in almost all cases. The acholia of the intertinal contents produces sooner or later important disturbances of nutrition. Most cases run a chronic course, the disease lasting for months. In only a few cases did exitus occur within the first week. All cases ended fatally, often with convulsions or sopor.

(b) Icterus produced by congenital vegetations at the portal canal or only the portal vein (peripylephlebitis congenita). The abnormalities just mentioned are probably due to congenital syphilis. The icterus is intense; the cases end fatally within one to three weeks. A certain diagnosis as to the anatomical alterations is probably not made until after death. Clinically, the diagnosis can be made with probability if in the new-born, aside from suffering from other signs of congenital syphilis, persistent icterus and bile-colored urine, there are also found symptoms of constriction of the portal vein, such as ascites, enlargement of the spleen and hemorrhage from the stomach and intestines.—*The Post Grad.*

NECROLOGY.

Dr. James G. Ramsay, of Salisbury, died at the home of his son, Jos. H. Ramsay, on January 10, 1903.

Dr. Ramsay graduated from Davidson College in its second class, 1841; received his diploma from Jefferson Medical College in 1848, and practiced medicine for over fifty years. He was State Senator from Rowan county for ten years; he also served one term in the Confederate Congress in Richmond. In 1846 he married Miss Sarah Foster, and to them were born two daughters and six sons, of whom one daughter and two sons are deceased.

Dr. Ramsay was a ruling elder in Third Creek Presbyterian Church for fifty years; he was a prominent Mason and attained to the Royal Arch degree. He was beloved by his patients and was held in the highest esteem by all who knew him, and died at a ripe old age, full of faith and looking with confidence to a blessed immortality beyond the grave.

RESOLUTIONS OF RESPECT.

WHEREAS, God, in His inscrutable wisdom, has called our venerable member, Dr. J. G. Ramsay, to his final reward,

Resolved 1. That we recognize His right to dispose of all things to His own glory, and while we mourn the loss of a valued member, we feel that our brother has left us a precious heritage in his exalted character and in the lofty example illustrated in his professional career.

2. We realize that to Dr. Ramsay the Creator had bequeathed a rich legacy of the varied qualities of intellectual endowment. He was a literary, scholarly and scientific man; a constant reader and a clear and profound thinker. His mind grasped, with keen discernment, the finer and salient points along different lines of research. He was also possessed of an excellent knowledge of human nature, which enabled him to gain a potent influence over his fellow citizens, resulting in his elevation to places of honor and trust. His success was not attained by the arts of the demagogue, but by the innate force of a strong personality.

3. To the Rowan County Medical

WHEN ALL ELSE FAILS

SEND YOUR CHRONICS TO

VADE MECUM SPRINGS

Splendid Hotel and Cottage Entertainment, Hot and Cold Mineral Baths and Modern Sanitary Equipment

Let us ship your patients the water for use at home, in bottles, carboys or barrels. We have in North Carolina a water that has no domestic competitor, and no foreign superior. See analysis below:

Analysis of Vade Mecum Water.

Grains per U. S. Gallon, 231 cubic inches.

	GRAINS
Magnesium Sulphate	7.33524
Calcium Sulphate	25.71113
Strontium Sulphate	.73481
Potassium Sulphate	1.17191
Sodium Sulphate	64 04838
Sodium Hyposulphate	.11663
Magnesium Carbonate	.50153
Calcium Carbonate	5.08299
Strotium Carbonate	.13413
Iron (ferrous) Carbonate	.39715
Lithium Chloride	.01399
Sodium Chloride	11.68057
Sodium Bromide traces	.——
Sodium Iodide	.00122
Sodium Arsenate	.00198
Calcium Fluoride	.09564
Calcium Phosphate	.01168
Magnesium Nitrate	.49512
Alumina	.03499
Silicic Acid	.67648
Carbon dioxide, combined with Mono-Carbonates	2.68321
	120.92846

		GRAINS
Sulphuric Acid	(SO3)	56.94360
Sulphurous Acid	(SO2)	.08514
Chlorine	(Cl)	7.07743
Iodine	(I)	.00105
Bromine	(Br)-trace.	
Flourine	(Fl)	.04665
Phosphoric Acid	(P205)	.00875
Nitric Acid	(NO3)	.41406
Carbonic Acid	(CO2)	6.60976
Lime	(CaO)	13.43569
Strontia	(Sro)	.51319
Magnesia	(MgO)	2.77594
Iron	(FeO)	.24669
Potash	(K2O)	.63333
Soda	(Na2O)	34.17817
Lithium	(Li)	.00234
Alumina	(Al2O3)	.03499
Silica	(SiO2)	.67648
		123.68326

In general terms I would place this water under the purgative water; this class embraces the celebrated water of Pullna, Bohemia, Friedrichshall, Germany, and Carlsbad, Bohemia, though your water is considerably milder in its action than either of the above waters and *I think on that account preferable.*

This shows a complete analysis of Vade Mecum Mineral Water made by me.

HENRY FROEHLING,
Analytical and Consulting Chemist
RICHMOND, VA.

For sale by all Dealers and Druggists or

VADE MECUM SPRING CO. - - - Vade Mecum, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain CACTINA, the active proximate principle of CEREUS GRANDIFLORA.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for
INDIGESTION

A palatable preparation of PANAX SCHINSENG in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

Society he was a tower of strength in its incipiency; and by right of pre-eminence, he can truthfully be denominated one of its founders and fathers. His name heads the list of its charter members. His allegiance to the Society knew no abatement while his physical strength remained, and his counsels were always sought and valued while he participated in its active work. He expressed to the members, not more than a year ago, his keen regret that failing health would not permit continued attendance upon the deliberations of the Society.

4. Dr. Ramsay was second to none in upholding and illustrating the ethics of the profession, and he recognized in every practicing physician a brother bound to him with strong and tender ties.

5. Dr. Ramsay's personal and reli-

gious life were conspicuously free from blame, and he was, emphatically, a pure man. Habits of abstemiousness and temperance ruled his life, and his speech and behavior, at all times, were such as to commend him to his associates as one worthy of emulation. His attitude, in his latter days, illustrated, strikingly, the Bible truth that "the hoary head is a crown of glory if it be found in the way of righteousness."

6. Resolved, That a copy of the preamble and resolutions be sent to the members of the family, and also to each of the city papers and the State medical journals for publication; and that a page on our record book be set apart to his memory.

JOHN WHITEHEAD,
W. L. CRUMP,
J. S. BROWN,
I. H. FOUST,
Committee.

EYE, EAR, NOSE AND THROAT DEPARTMENT.

In Charge of W. H. WAKEFIELD, M. D.

Removal of a Shoe Button From the Nasal Passage.—H. M. Childress, M. D., Paducah, Ky.

In October I was called to see Eva, aged 6 years, who apparently had a severe cast of postnasal catarrh. The general health was good. The history of the case is as follows: The first appearance of any trouble in the nasal passage was noticed four years ago. The symptoms at first were mild, but after a year they grew worse, and a slight cold caused the right nasal passage to close up and the right side of the face to become swollen and painful. The trouble finally extended to the right ear, and there was more or less suppuration, with very offensive odor, through the external ear. A physician treated her for catarrh for about three years. I learned that the treatment consisted mainly in spraying the nose with carbolized solutions and the applications of various ointments.

I found no marked hypertrophied conditions, which led me to believe the passage was obstructed by a foreign body, and my diagnosis was confirmed when I removed from her nose a shoe button, located between the inferior and middle turbinated bodies, which had by some means gotten into the passage and remained there for a period of four years and had escaped detection. The button was of the ordinary rubber-like composition, and when removed was rough with depressions and abrasions. The wire eyelet crumbled on attempting to pick it up; the rubber composition, however, was still firm and retained its original shape, and was perfect except as to the rough depressions. The patient recovered.—*Jour. A. M. A.*

Points of Necessary Prominence in the Treatment of Catarrhal Deafness.

This is the title of a paper read recently by Dr. Sargent F. Snow, of Syracuse, N. Y. He believed that in chronic cases a good prognosis was warranted in many more cases than it is now given. The secret of success was often to be found in the relief of a constitutional condition by which the Eustachian tube is kept occluded. The best treatment was the introduction of air under pressure, saturated with gum camphor and iodine, through the Eustachian tube into the middle ear, but such treatment was out of the question

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these Preparations.

A

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

R Each fluidounce contains:

Hypophosphites	Soda	2 gr.
"	Lime	1½ gr.
"	Iron	1½ gr.
"	Quinine.	¾ gr.
"	Manganese ..	1½ gr.
"	Strychnine .	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate	Sodium	12 grains.
"	Potassium	4 "
"	Calcium	4 "
"	Iron	2 "

FREE Monohydrated Phosphoric Acid 16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE.—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

C

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence of a sedentery life, coupled with nervous and mental stal strain.

Reliable Pepsin is one of the best Digestive agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating. Children, one-half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromatic menstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable.

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50

N. B.—We also make **25 per cent. strength.**
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

Saloform, in Powder, per ounce	$1 25
Saloform, 5-grain Tablets, per 100	1 25
Saloform Elixir, pints	2 00
Solution Albuminate of Iron, Syrup Albuminate of Iron Comp., pints	1 00
Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

Please specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

Founded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

until patency of this tube had been secured. The modern tendency to coddling and improper personal hygiene were serious obstacles to the successful treatment of these cases. Wool and linen mesh were the best materials for the undergarments. The living rooms should be well ventilated, and cold baths should be taken regularly. In a few cases in which such baths seem impracticable or undesirable, a partial substitute would be found in brisk, dry rubbing of the skin with a harsh towel. The functional activity of the liver must be maintained.—*Laryngoscope.*

Anesthesia of Mucous Membrane, with 25 per cent. Alcoholic Solution of Cocaine in Operations on the Nose, Pharynx and Larynx.—Wroblewski.

The author has much to say in favor of the anesthetic action of the alcoholic solution of cocaine. He had never seen any symptoms of cocaine intoxication, although his experience included some fifty children as well as adults. He claims that the alcohol is an antidote. The best method of preparing the solution is to place the cocaine and alcohol in a test tube, heating gently to the boiling point. The cocaine dissolves very quickly and the solution remains clear permanently. Considerable smarting results from the first application of the solution, but, by applying a weak, watery solution of the same drug this can be avoided. Complete anesthesia can be produced with a very small amount of the solution. The writer has applied it in operations on the nose and larynx, as well as for removal of tonsils and adenoids with satisfactory results.—*The Laryngoscope.*

Injuries of the Membrane Tympani.—Samuel G. Dabney, M. D., Louisville, Ky.

In this comprehensive exposition the principal conclusions arrived at are:

That the majority of ruptures are caused by boxing the ears, hence this method of chastisement should be condemned.

Injudicious efforts at the removal of foreign bodies are more dangerous than the body itself.

Persons with diseased Eustachian tubes run some risk in working caissons. The risk may be reduced by frequent inflations.

In cases of injury to the ears careful examinations should be made before using syringe or instillation, by which a simple injury may be converted into a tedious or dangerous suppuration.

In fractures of the temporal bone, or base of the skull, the diagnostic importance of a serous discharge depends upon the time of appearance. Immediate appearance means cerebro-spinal fluid; after 24 hours, probably due to inflammation of the middle ear.—*The Laryngoscope.*

MEDICAL NEWS AND ITEMS.

Famine prevails in the northern part of Sweden.

The plague situation at Mazatian, in Mexico, is not improving.

The Tri-State Medical Society, of Virginia and the Carolinas, will meet in Columbia, S. C., on February 25th and 26th.

New York City proposes to isolate patients suffering from malaria, and to

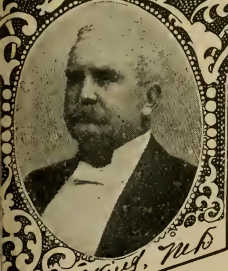
Electric Heater Used by Dr. Hopkins in Treating Deafness.

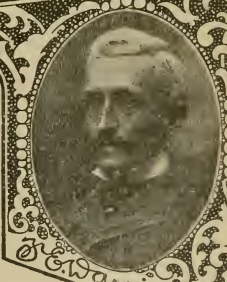
THE TERRY HEATER CO.,
Cleveland, Ohio.

SOMETHING FOR LEISURE HOURS

STORIES OF A COUNTRY DOCTOR

RECOLLECTIONS OF A REBEL SURGEON





ALL WORK AND NO PLAY MAKES JACK A DULL BOY

Here are two books chock full of wit, fun and pathos, that should be on every doctor's table. Their titles tell the story. They speak for themselves. Each $1, post-paid

The Clinic Publishing Company, - Ravenswood Station, Chicago.

cage them in nettings to prevent them from absorbing the infected blood.

Sued for Suicide of Husband.—Mrs. Minnie Kincaid has sued the borough of South Bethlehem, Pa., for $20,000 for the death of her husband, who hanged himself while quarantined with smallpox.

University Hospital to be Enlarged.—The University of Pennsylvania Hospital is to be enlarged and improved. About $300,000 is to be expended, which will nearly double the capacity of the institution.

To Kill Hawaiian Mosquitoes.—A crusade with oil to kill mosquitoes is begun in a part of Honolulu. The lowland taro patches and swamps are an especial object of attack because of their standing water.

Dr. Rud. B. Granger, managing editor of the *New York Medical Journal* for twenty years, retires from that position to assume charge of a New York office of the great publishing firm of W. B. Saunders & Co.

Want Panama Canal Physician.—The American Association for the Advancement of Science petitioned the President, January 2, that one member of the Isthmian Canal Commission should be a physician.

The government physician at the Sac and Fox Indian agency, in Oklohoma, announces that a large majority of the tribe are afflicted with incurable diseases, and in all probability they will be extinct within the next few years.

Lectures on Tropical Hygiene.—Arrangements have been made by the trustees of Jefferson Medical College for Captain Charles F. Keifer, assistant surgeon, U. S. A., to deliver to the senior class of the college a series of eight lectures on tropical hygiene, limited to a consideration of purely tropical diseases.

Expectoration Prohibited.—An ordinance has been passed by the common council of Philadelphia, making expectoration on the sidewalks, in public places and conveyances, a nuisance, and providing a penalty of $5.00 for violation of the ordinance. (Philadelphia is behind the times. Charlotte has had an anti-spitting ordinance in force for two or three years.—ED.)

Too Many Physicians.—The dean of the Paris faculty remarked at a recent meeting of the Academic Council that "families and teachers ought to dissuade young people from entering on a medical career unless possessed of independent means or exhibiting a very marked vocation for medical studies. There are too many physicians. This is very bad for the patients as well as for the physicians themselves."

British Columbia Plague Quarantined.—Dr. A. T. Watt, superintendent of the British Columbia quarantine, has given notice of the establishment of new regulations on account of the epidemic of bubonic plague at San Francisco. The various steamers plying between San Francisco and Canadian ports have been notified and are warned to use funnels on their mooring lines at San Francisco to prevent rats coming on board.

Croton Water Not Responsible.—The examinations of the Croton water, made by the health department, do not indicate that the water supply is responsible for the prevalence of typhoid. The health authorities are disposed to lay the blame on the use of oysters, clams, and some vegetables and milk. During the week ended January 3, 68 cases of typhoid fever were reported, which is in excess of the number for the corresponding period of last year.

Would Bar Out Consumptives.—The special committee on tuberculosis ap-

An Elegant Reproduction of a Charming - - - - $15,000 Painting GIVEN AWAY

We have been fortunate in making arrangements with the publishers of the WOMAN'S HOME COMPANION, so that we are able to give our subscribers a chance to accept the biggest offer ever made by any publishing house. The picture that we offer here is by E. Blair Leighton, R A., a most celebrated artist. When exhibited for the first time it was quickly bought up at the enormous price of $15,000, and hung in a famous gallery, where it is admired by thousands and thousands.

REDUCED ILLUSTRATION "GOD SPEED" FULL SIZE 22 BY 28 INCHES

Woman's Home Companion

This magazine is edited and made up in the city of New York, the leading literary and art center of America. It is printed on the finest paper, has 44 to 60 large pages, 11 by 16 inches. It contains the Best Short Stories, Fashions, Children's Pages, Prize Contests Monthly, Nature-Study Club, Embroidery, Physical Culture, Talks With Girls, Nurse Norah's Fairy Tales, the Most Popular Serial Stories, Handy Tool Series for Boys, Sam Loyd's Puzzles, Science and Invention, Social Studies, the Dining-Table, the Kitchen, Twelve Stirring Historical Events Pictured by Celebrated Artists. The twelve numbers will contain more than one thousand beautiful illustrations. Its 400,000 copies every month carry messages of help, profit, pleasure, education, culture and refinement to over two million readers. Its writers and artists are the most famous in America. It is altogether the cleanest, brightest, handsomest, choicest and best of American home magazines published at $1.00 a year.

A Total of Over $7.00 for only $1.85.

"God Speed," very, very cheap at - - - - $5 00
Woman's Home Companion, one year, price - 1 00
Carolina Medical Journal, one year, price - - 1 00

Both Papers One Year and this Picture sent to any address for only - - - **$1.85**

In this offer, although paying less than the ordinary and regular price of the papers for a year, you get in addition the above described charming picture entirely free. The papers and picture in the above offer can go to different addresses. The above offer applies to old and new subscribers. Send all orders to this office.

CAROLINA MEDICAL JOURNAL, CHARLOTTE, N. C.

pointed at the last session of the Legislature of California, has decided against the proposition for the establishment of a state hospital for the care of tuberculosis patients. It also decided to recommend in its report to the Legislature the adoption and rigid enforcement of more stringent laws governing the admission to California of persons afflicted with tuberculosis.

For Appendicular Inflammation.—According to the *Clinical Review* for January, Lauder Brunton recommends the administration of from 10 to 15 grains of sodium salicylate every two hours, and from 10 to 15 minims of tincture of belladonna, in appendicular inflammation. They may be given together or alternately, but should not be mixed, because either drug must be lessened in amount or dropped altogether when its physiological effects appear.—*N. Y. Med. Journal.*

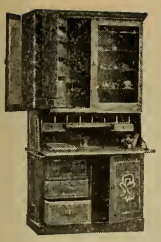
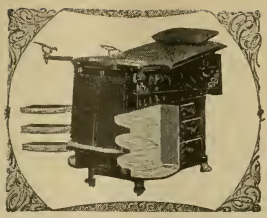
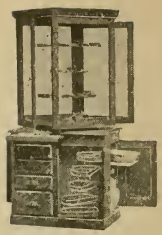
Drugs to be Avoided by Nursing Mothers.—According to the *Clinical Review* for January, the following drugs are eliminated by the milk glands, and care should therefore be taken in prescribing any of them for nursing mothers: Strychnine, carbolic acid, quinine, cascara sagrada, sulphur, arsenic, iodine, opium, iron, bismuth, senna, rhubarb, jalap, zinc, mercury, potassium iodide, magnesium sulphate, castor oil, garlic, oil of turpentine, oil of copaiba, and all the volatile oils.

The Washington Plague Conference.—The conference held in Washington in January manifested a gratifying state of concord between the various State boards of health and the United States Public Health and Marine Hospital Service in the firm stand taken to the effect that an outbreak of infectious disease ought never to be concealed or underrated. It is to be hoped that at last all classes of the people of California will acknowledge the need of stringent measures in dealing with the plague in San Francisco.

Irregulars and Irregularities—Henry Spencer, who practiced medicine in Rozellville under the name of Dr. Chas. A. Clark, and was charged with making false representations to the State Board of Medical Examiners, to secure a license to practice, pleaded guilty, January 5th, and was sentenced to one year's imprisonment in the House of Correction.——Adolph W. Dude, Milwaukee, under arrest on suspicion of having performed an illegal operation, has acknowledged that he is not a regularly licensed practitioner in the State.

"Million Dollar Hospital" Wants Funds.—The Society of the Lying-in Hospital, better known as J. Pierpont Morgan's million dollar hospital, has made an appeal to the public for funds for its maintenance. The hospital is intended to accommodate 186 persons, but at present only 62 beds are in use. The plea for help is based on the fact that all the other maternity hospitals of the city have a total of less than 600 beds, while the number of births in the borough of Manhattan alone in the past year was 51,688, i. e., one child was born about every ten minutes.

Result of Professor Lorenz's Work.—At the Academy of Medicine, on January 16th, a number of patients were shown who had been operated on by Professor Lorenz during his recent visit to this city. The cases shown included both unilateral and bilateral dislocations. All appear to be doing quite well. One patient was shown who had been operated on by Dr. Royal Whitman about twelve months previously, this being the only one so far advanced as to permit of the removal of the plaster casts, thus giving complete demonstration of the success of the operation.

A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your patients. Therefore, in the selection of your equipment you should exercise great care. The testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

Are the best and are adapted to all lines of regular and special practice. They are superior in workmanship and design, and include more conveniences than any other line on the market. (Catalogue "A" fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

A Sanitorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

Beautifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

MAPLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

---

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &C.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents.

Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

According to *American Medicine,* a sanatorium for the treatment of pulmonary tuberculosis, located at Luray, Va., has the system of ventilation so arranged that all the air for the institution is supplied from the underground caverns. It is claimed that the air of limestone caverns has all the characteristics of the pure rarefied air of high altitudes, and that an investigation of the air in caverns supplying the sanatorium showed it to be of uniform temperature, remarkably pure and free from all germs and dust particles, and especially adapted for the treatment of pulmonary complaints.

Osteopaths in Virginia.—A bill has been drawn up and will shortly be presented in the Virginia Legislature under which osteopaths will be required to pass an examination before the State Board of Medical Examiners, upon those subjects upon which they profess knowledge, but not upon all the subjects covered by the examining board. A bill requiring the examination of osteopaths by the board of medical examiners which was defeated last winter required osteopaths to stand the regular medical examination. It is understood that the proposed measure is bitterly opposed by the osteopaths, who claim that it will be so construed by the members of the examining board as to work a hardship to osteopaths.—*N. Y. Med. Journal.*

Notification of Malarial Fever, Trachoma and Pertussis in New York.—The board of health desires to call the attention of physicians to the following resolutions which have been recently adopted. "That *all public institutions, hospitals, homes, asylums, etc., be required* to report all cases of malarial fever which come under their observation, giving the name, age, sex, occupation and present address of the patient, and also information as to whether the attack is a primary infection or relapse, and the address where the disease was probably contracted. That *all physicians* in the City of New York *be requested* to furnish similar information in regard to patients suffering from malarial fever under their care. That all physicians be required to report all cases of acute and chronic ophthalmia (trachoma) and pertussis (whooping cough) and to furnish such information regarding them as is required in other forms of contagious disease."—*N. Y. Med. Journal.*

One Week's Wonders Crop.

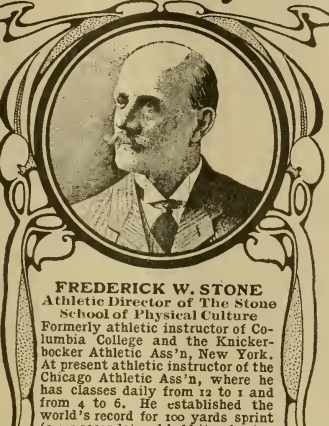
Dr. Barrows, of New York, introduces into the circulation a solution of formie aldehyde to promptly check the deadly work of streptococci without injury to the patient.

Dr. Crite, of Cleveland, announces that adrenalin is a more powerful cardiac roborant than had been supposed. The newspaper report that he restored life to a dog dead as result of an electric shock.

Dr. Dunbar, of Hamburg Hygiene Institute, proposes to treat hay fever by means of an antitoxic serum. Thus do the world move.

The Enno Sander Prize, of the Association of Military Surgeons of the United States, for 1903, will be awarded to the author of the best essay on "The Differential Diagnosis of Typhoid Fever in Its Earliest Stages." The board of awards will consist of Dr. Austin Flint, of New York; Colonel Calvin DeWitt, of the army, and Prof. Victor C. Vaughan, of Ann Arbor. Full information concerning the contest may be obtained from Major James Evelyn Pilcher, Carlisle, Pa., the secretary of the Association.

Exercise Without Apparatus
Taught by mail — in your own home



FREDERICK W. STONE
Athletic Director of The Stone School of Physical Culture
Formerly athletic instructor of Columbia College and the Knickerbocker Athletic Ass'n, New York. At present athletic instructor of the Chicago Athletic Ass'n, where he has classes daily from 12 to 1 and from 4 to 6. He established the world's record for 100 yards sprint (9 4-5 seconds) and held it unbeaten until 1902. Has been an instructor in physical culture for 32 years.

Mr. Stone's extensive experience with institutions of the highest character better qualifies him than any other instructor to teach men and women the science of self-development.

WE are successfully teaching men and women in every part of the world how to get well and how to stay well; how to broaden the shoulders, deepen the chest, and increase the lung capacity; how to improve the circulation; how to correct chronic complaints of the stomach and bowels; how to obtain sound, restful sleep; how to increase the weight or reduce it. We teach them how to obtain all this physical wealth by exercising only 10 to 20 minutes each day, just before retiring or upon arising. **The Stone Method** is a system of concentrated exertion, by which more exercise is actually obtained in 10 minutes than by the use of apparatus two hours, and embraces a thorough course in **deep breathing** without extra expense. **Does not overtax the heart.** The exercises are rational, moderate, and are taught by an instructor thoroughly versed in physiology. Individual instruction is given in every case according to the requirements of the pupil.

Follow our instructions and we promise you a fine, strong, well-developed physique, which bears every evidence of perfect manhood; a clear brain; a light step; a splendid circulation; a ruddy complexion; bright eyes; sound, easy-working lungs, with plenty of room in which to expand; an increased appetite; good digestion; an active liver; sound, restful sleep; an erect carriage.

WOMEN receive as much benefit from **The Stone Method** as men. However, no woman desires the same muscular development which she admires in men, which proves again the desirability of our individual instruction. We take into consideration the occupation, habits, mode of living, etc., and give instruction accordingly. We can insure perfect health, a good complexion, and, when desired, an increased chest (or bust) development; can increase the weight or reduce it; can fill out those hollow places and give the form that beautiful contour so much desired; can positively reduce the abdomen also.

We should like to hear from every woman who has enough interest in her health and in her perfect development to read this advertisement. We have some literature and testimonials which we will send FREE for the asking, and we are confident they will not only prove interesting, but convincing proof of the superiority of **The Stone Method** over any other system.

Mr. Stone is the only physical instructor paying special attention to women and children. He is ably assisted by Mrs. Ellen Walker, who has had a very extensive experience, and who alone opens and answers letters of a private nature. Confidential letters may be addressed **"Mrs. Ellen Walker, care The Stone School."**

ILLUSTRATED BOOKLETS AND TESTIMONIALS FREE BY MAIL

It is impossible, in this limited space, to convey an adequate idea of the importance of **The Stone Method** of physical culture in attaining and maintaining perfect development and good health. We have prepared a booklet for men and one for women which explain the system in detail, our plan of mail instruction, etc. These booklets contain many photos from life, showing what others have accomplished by **The Stone Method.** **SENT FREE BY MAIL,** together with fac-simile testimonials, measurement blanks, etc. Write today. The booklets will prove interesting.

The Stone School of Scientific Physical Culture

1687 MASONIC TEMPLE, CHICAGO, ILL.

LONDON: 4 Bloomsbury Street, New Oxford Street, W. C.

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED IN 1881—OPENED IN 1882.

The New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant, and the hospital wards adjoin the lecture rooms. Since the fire in 1896, a new building has been erected and thoroughly equipped, and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James P. Tuttle, M. D.; John A. Wyeth M. D.
MEDICINE—Isaac Adler, M. D.; Morris Manges, M. D.; W. H Katzenbach, M. D.; W. W. Van Valzah, M. D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt. H. Wylie, M. D.; Brooks H. Wells, M. D.; W Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—August Shibert. M. D.
DERMATOLOGY—Edward B Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O. Born. M. D.; W. E Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M D.; Robert C. Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederich Whiting, M. D.
EUROLOGY—B. Sachs, M. D
OBSTETRICE—Edward A. Ayers, M D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York.

THE CHARLOTTE OBSERVER,

CHARLOTTE, N. C.

J. P. CALDWELL, Editor. DAILY AND SEMI-WEEKLY.

North Carolina's Foremost Newspaper.

Independent and fearless; bigger and more attractive than ever. The most complete telegraphic Press reports in existence. All the news of the world. Complete Daily reports from the State and National Capital

SUBSCRIPTION PRICE.

Three Months	$2 00
Six Months	4 00
One Year	8 00

THE SEMI-WEEKLY OBSERVER, Published on Tuesdays and Fridays at $1 00 per year.

CASH OR CREDIT.

Catalogue FREE.

PRICE $33.50

It will pay you to send for our Catalogue No. 6, quoting prices on Buggies, Harness, etc. We sell direct from our Factory to Consumers at Factory Prices. This guaranteed Buggy only $33.50; Cash or Easy Monthly Payments. We trust honest people located in all parts of the world.

Write for Free Catalogue. MENTION THIS PAPER,

CENTURY MF'G CO. DEP'T 352 East St. Louis, Ill.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

Samples and Literature supplied by

AGURIN
The Non-Irritating Diuretic.

EPICARIN
The Non-Toxic Dermal Parasiticide.

SALOQUININE
The Tasteless and Improved Quinine.

HEDONAL
The Promoter of Natural Sleep.

FERRO-SOMATOSE
The Ferruginous Nutrient and Tonic.

PROTARGOL
Antigonorrheal, Antiseptic

ASPIRIN
The Best Salicylate.

MELLIN'S INFANTS' FOOD

Mellin's Food and good fresh milk make a combination that is like mother's milk. Babies thrive on Mellin's Food.

Our book, "The Home Modification of Cow's Milk," sent to physicians free upon request.

Mellin's Food Co. : : : Boston, Mass.

COUGH

The Sum of Clinical Experience Designates Glyco-Heroin (Smith) as a Respiratory Sedative Superior in All Respects to the Preparations of Opium, Morphine, Codeine and Other Narcotics and withal devoid of the toxic or depressing effects which characterize the latter when given in doses sufficient to reduce the reflex irritability of the bronchial, tracheal and laryngeal mucons membranes

THE PROBLEM

of administering Heroin in proper doses in such form as will give the therapeutic virtues of this drug full sway, and will suit the palate of the most exacting adult or the most capricioos child.

HAS BEEN SOLVED BY

the pharmaceutical compound known as

GLYCO-HEROIN (Smith)

The results attained with GLYCO-HEROIN (SMITH) in the alleviation and cure of cough are attested by numerous clinical studies that have appeared in the medical journals within the past few years

Scientifically Compounded. Scientifically Conceived. GLYCO-HEROIN (SMITH) simply stands upon its merits before the profession, ready to prove its efficacy to all who are interested in the advances in the art of medication.

NOTES.

GLYCO-HEROIN (SMITH) is supplied to the druggist in sixteen ounce dispensing bottles only. The quantity ordinarily prescribed by the physician is two, three or four ounces.

DOSE.

The adult dose of GLYCO-HEROIN (SMITH) is one teaspoonful, repeated every two hours or at longer intervals, as the case may require.
Children of ten or more years, from a quarter to a half teaspoonful.
Children of three years or more, five to ten drops

SOLE BRITISH AGENTS,
THOMAS CHRISTY & CO.,
OLD SWAN LANE, UPPER THAMES ST., LONDON, E. C.

MARTIN H. SMITH & CO., Chemists,
NEW YORK CITY.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

PEACOCK'S BROMIDES

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium. DOSE:
One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day. **OD CHEM. CO., NEW YORK.**

St. Luke's Hospital,

1000 West Grace St.,
RICHMOND, VIRGINIA.

Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,
RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.

AS The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our
. . . **regular eleven-ounce hexagonal bottle,** . . .
you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

SURGICAL SHOCK

is reduced to a minimum by high rectal injections of ***BOVININE*** combined with an equal quantity of salt solution to render absorption more rapid. It should be heated to 70°F, and administered prior to, during, and subsequent to operation. The quantity should be suited to the individual case, varying from two to six ounces of each.

Bovinine

improves the heart action and circulation at once; its sustaining effect is continuous for two to three hours.

The blood which has become non-aerated through ether administration is oxygenated by the introduction of a fresh supply, and is rapidly restored to normal condition. To this fact is due the power of ***BOVININE*** to prevent the thirst, nausea, and emesis, which usually follow anæsthesia.

Its wonderfully nourishing, supporting, and healing properties render it a necessary adjunct to the operating room.

Reports of numerous cases are cited in our scientific treatise on Hæmatherapy. It is yours for the asking.

The Bovinine Company,

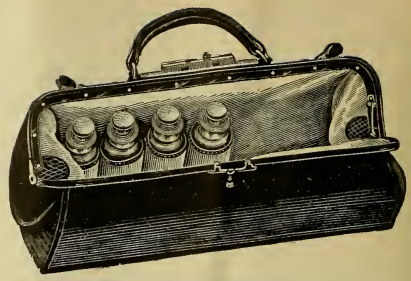
75 West Houston Street, NEW YORK.

OBSTETRICAL BAG,

Lined With Chamois.

Price, including bottles:

15 inch	$4 25
16 "	4 50
17 "	4 75
18 "	5 00



Cabin Form Obstetrical Bags

Lined With Rubber Cloth and Built on Steel Frame.

Price, including bottles:

15 inch	$5 25
16 "	5 75
17 "	6 00
18 "	6 25

THE VALZAHN COMPANY,

Manufacturers and Importers of Surgical Supplies,

132 South Eleventh St., Philadelphia, Pa.

BROADOAKS SANATORIUM,

MORGANTON, NORTH CAROLINA.

A Private Hospital for the Treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

ISAAC M. TAYLOR, M. D. JOHN McCAMPBELL, M. D.

100 TABLETS FREE. . . . . RETURN THIS AD.

ALKAGESTA

Trade Mark

(Alkaline Digestive)

Being an exposition of all the Vegetable and Animal Digestive Ferments that are active in the Alkaline secretions.

FOR THE TREATMENT OF

Intestinal Indigestion and Amylaceous Dyspepsia.

Alkagesta (Liquid) cost one dollar per pint bottle, and the dose is from one to four teaspoonfuls immediately before or after meals or both.

Alkagesta Tablets will not dissolve in the stomach, and cost on prescription 25c. for 35 tablets, or sold direct to the doctor in bottles of 500 or 1,000 tablets. Dose, one to three tablets before or after eating.

WATERBURY LABORATORIES, SELLING AGENTS,

12 West Broadway, New York.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

THE LITERARY DIGEST

An Illustrated Weekly Magazine of information and discussion on all chief subjects of human interest, as digested from the world's choicest periodical literature. The intelligent of every rank and creed consider that for the most profitable periodical reading published it excels:

BECAUSE when time is precious it enables you to make the most of every reading moment, providing you with the cream of nearly 1,000 of the world's most valuable periodicals.

BECAUSE it selects, translates, digests, or reprints the best literature to be found in the numberless periodicals printed in all lands, giving its subscribers the benefit of expert editorial skill and discrimination.

BECAUSE it enables you to greatly economize your expenditures for periodicals, making it possible to get the best articles in a greater number than you would ever subscribe for, and this for the price of only a single subscription.

BECAUSE regular readers of THE LITERARY DIGEST become versatile on all sides of topics of current interest and discussion in politics, science, literature, art, religion, etc.

Send in Your Subscription Now for the Next Year. $3.00 per Year. Single Copies, 10 Cents.

FUNK & WAGNALLS CO., NEW YORK.

Table of Contents.

PAGE

ORIGINAL COMMUNICATIONS:

Cornual Pregnancy, with Report of a Case: Stuart McGuire, M. D. 105

The Causes and Complications of Gout: John M. Upsher, M. D. 108

Glycochocolate of Soda: Charles I. Hill, M. D. 113

The Mechanics of Mercury in Syphilis: Thomas W. Murrell, M. D. 117

SELECTED PAPERS 120

NEWER MATERIA MEDICA 126

THERAPEUTIC HINTS 132

BOOK REVIEWS 136

REVIEW OF MEDICAL AND SURGICAL PROGRESS 140

MEDICAL NEWS AND ITEMS 144

NATURE AND SCIENCE 152

IF IN NEED
OF A RECONSTRUCTIVE, NERVE AND MUSCLE
BUILDER, WHERE THERE IS ALSO
A DEMAND FOR MORE AND
BETTER FLESH,
CORD. OL. MORRHUAE COMP.
HAGEE
WILL MEET ALL
REQUIREMENTS:
IT
CONTAINS all the potent
elements of cod liver oil, and has been thoroughly tested and fully endorsed by our most eminent physicians. It is no experiment to prescribe
HAGEE'S CORDIAL OF COD LIVER OIL
WITH HYPOPHOSPHITES OF LIME AND SODA
Dispensed in 16-ounce bottles by all Druggists
KATHARMON CHEMICAL CO., ST. LOUIS, MO.

Index to Advertisers.

	PAGE
Parke, Davis & Co. .....Cover	1
Lambert Pharmacal Co..... "	2
Mr. Fellows..... "	3
Presbyterian College for Women "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.	1
Martin H. Smith Co	2
Od Chemical Co.	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.....	5
The Valzahn Co.....	6
Broadoaks Sanatorium.....	6
Waterbury Laboratories	7
Sharp & Dohme.....	8
Funk & Wagnalls...	9
Katharmon Chemical Co.....	10
Mariani & Co.....	11
The Antikamnia Chemical Co.	11
Oakland Chemical Co.	12
Battle & Co.	12
University of Pennsylvania.....	13
The Halcyon Retreat.....	13
Kress & Owen Co.	13
The Purdue Frederick Co.....	14
Rio Chemical Co.	14
Wm. R. Warner & Co.	131

	PAGE
Charles N. Crittenton Co.....	133
Vapo-Cresolene Co.....	135
The Keeley Institute.....	135
Dad Chemical Co.....	135
John Wanamaker	137
Dr A. M. Whisnant	141
Invalids Table Co.....	141
The Tilden Co.....	142
Dr. E. R. Russell	143
Dr. A J. Crowell.....	143
Dr. W. O. Nisbet.....	143
Dr. W. H Wakefield	143
Vade Mecum Spring Co.	145
Sultan Drug Co.	145
Robinson-Pettet Co.	147
The Terry Heater Co	148
Clinic Publishing Co.....	149
W. D. Allison Co.....	153
Maplewood Sanatorium.....	153
Munn & Co.....	153
R. L. Polk & Co.....	153
Stone School of Scientific Physical Culture	155
N. Y. Poly. Med School and Hospital	156
The Charlotte Observer	156
Century Mfg. Co.....	156

Written endorsements from upwards of 8,000 physicians prove

VIN MARIANI

During 40 years invariably

"THE STANDARD PREPARATION OF ERYTHROXYLON COCA."

Most useful adjuvant in general treatment as a

TONIC, RESTORATIVE, MILD STIMULANT.

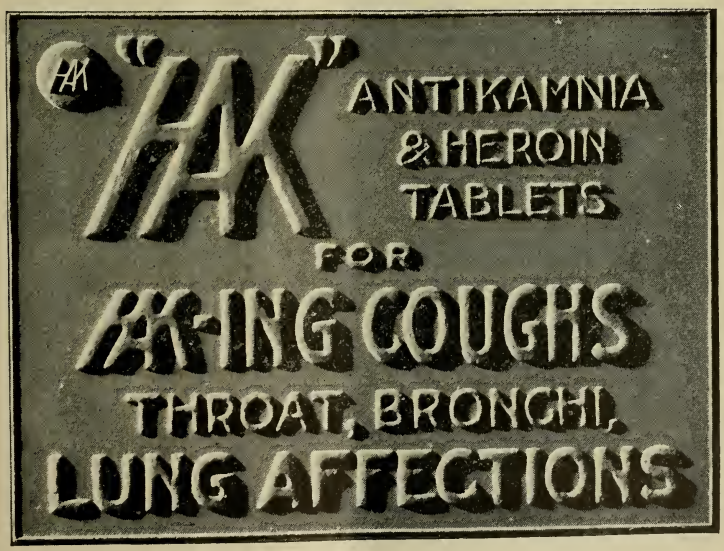
SENT POSTPAID:

80 Page, Illustrated Monograph by European and American observers, with formula, dose, etc., cloth-bound, will be forwarded postpaid to any physician on application.

PARIS: 41 Boulevard Haussman.
LABORATORY: Neuilly, Sur-Seine, France.
LONDON: 49 Haymarket.
BERLIN: 56 Charlotten Strasse.
MONTREAL: 87 St. James Street.

MARIANI & CO.,
52 West 15th St., New York.

VIN MARIANI on sale at Druggists throughout the World. CAUTION.—Refuse Substitutes, Avoid Disappointment.



Five-Grain Antikamnia Tablets
Laxative Antikamnia & Quinine Tablets
| AK |
Antikamnia & Codeine Tablets
Antikamnia & Heroin Tablets

ECTHOL, NEITHER ALTERATIVE NOR ANTISEPTIC IN THE SENSE IN WHICH THOSE WORDS ARE USUALLY UNDERSTOOD. IT IS ANTI-PURULENT, ANTI-MORBIFIC--A CORRECTOR OF THE DEPRAVED CONDITION OF THE FLUIDS AND TISSUES.

SAMPLE (12-oz.) BOTTLE SENT FREE ON RECEIPT OF 25 CTS.

FORMULA:--Active principles of Echinacia and Thuja.

BROMIDIA
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U. S. A.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

University of Pennsylvania

Department of Medicine.

The 138th Annual Session will begin on the last Friday in September, 1903, at 12 m., and will end at Commencement, the third Wednesday in June.

The Curriculum is graded, and attendance upon four annual sessions is required.

Practical Instruction, including laboratory work in Chemistry, Histology, Osteology, Bacteriology, Pathology, Physiology and Pharmacy, with bedside instruction in Medicine, Surgery, Gynæcology and Obstetrics, is a part of the regular course, and without additional expense.

For catalogue and announcement containing particulars, apply to

DR. CHAS. H. FRAZIER, Acting Dean,

36th St. and Woodland Ave., Philadelphia.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.

Dr. W. F. Goldsmith, General Surgery.

Dr. C. C. Stockard, General Medicine and Drug Habits.

Dr. S. G. C. Pinckney, Nervous Diseases.

Dr. J. M. Crawford, Eye, Ear, Nose and Throat.

Dr. Michael Hoke, Orthopoedic Surgery.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

17 W. Cain Street, Atlanta, Ga.

THE ALKALINITY OF BLOOD SERUM

GLYCO-THYMOLINE

(KRESS)

ASEPTIC
ALKALINE, ALTERATIVE

A Purgative for Mucous Membrane

INDICATED IN ALL CATARRHAL CONDITIONS

HASTENS RESOLUTION
FOSTERS CELL GROWTH

SAMPLES AND LITERATURE ON APPLICATION

KRESS & OWEN COMPANY, 221 Fulton St., New York.

JUST NOW

when the debilitated and poorly nourished are subject to coughs and colds, the remedy of most value is

GRAY'S Glycerine TONIC Comp.

Its specific action on the respiratory organs is second only to its unique value in malnutrition and general debility

THE PURDUE FREDERICK CO.
No. 15 Murray Street, New York

A Useful Nerve Stimulant and Tonic.

CELERINA is a powerful stimulant WITHOUT the depressing AFTER-EFFECTS of alcohol, caffeine, nitro-glycerine, etc. It is also a reliable Nerve Tonic. A pleasant exhilaration is experienced after a dose of one or more teaspoonfuls, and under its continued use a renewed capacity for mental and physical exertion results. It is indicated in all forms of exhaustion, mental inertia and senile weakness.

DOSE: One or Two Teaspoonfuls Three Times a Day.

A SAMPLE BOTTLE SENT FREE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

RIO CHEMICAL CO., - - NEW YORK.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., MARCH, 1903. No. 3

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

Subscription $1.00 per year, in advance.
Subscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
Receipts.—The receipt of all money is immediately acknowledged.
Important Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it continued expecting to receive a remittance at their earliest convenience.
We Notify all subscribers when their paid subscription expires.

ORIGINAL COMMUNICATIONS.

Cornual Pregnancy, With Report of a Case.*

BY STUART MCGUIRE, M. D., Surgeon in Charge St. Luke's Hospital, Richmond, Va.

Much has been written with reference to tubal pregnancy, but little attention has as yet been paid to cornual pregnancy. A recent mistake in diagnosis which lead me to operate on a bifurcated uterus about to rupture from pregnancy in one of its horns, has interested me in the subject, and I wish to report the case and briefly discuss the condition:

Mrs. S., aged 28, married for eighteen months with history of one miscarriage. Patient began to menstruate at the usual age and her periods were regular and natural. Her general health was good and she had no reason to suspect that she had any uterine or other pelvic trouble. In March, 1902, she missed a period and shortly afterward began to pass blood in small quantities at frequent intervals from the vagina. Three months later she was suddenly seized with severe pain in the lower right abdomen. The pain was characterized as cutting or tearing, was attended by nausea and faintness, and confined the patient to bed. The patient's regular medical attendant was sent for, who stated that he thought the trouble was tubal pregnancy, and advised an operation. Several days later the case was transferred to me.

I found the patient in bed, suffering with paroxysms of pain and passing blood from the vagina. The abdominal walls were rigid, but on making a bimanual examination, I succeeded in palpating a soft but elastic mass to the right of the cervex, which corresponded exactly in tactile impression and in anatomical location with cases of unruptured tubal pregnancy I had previously diagnosticated. I stated that I agreed with the opinion of my predecessor; that I thought the case was undoubtedly one of extra-uterine gestation, and I advised immediate operative intervention. The patient was moved

*Paper read at the meeting of the Tri-State Medical Association at Columbia, S. C., Feb. 26-27, 1903.

to my private sanitarium, and as soon as the necessary preparations could be made, the abdomen was opened.

The uterus I delivered through the wound was the queerest specimen I ever saw. But for the fact that as a boy I had dissected many cats and was familiar with the double-horned uterus found in the female of that animal, I would have been at a loss to recognize the condition with which I had to deal.

The uterus was cleft from fundus to cervix; the two diverging sides tapering to and terminating in the Fallopian tubes. The left horn was flaccid and empty, but the right was distended by a swelling until its walls were so thin that they were transparent. Evidently the case was one of cornual pregnancy, with imminent danger of rupture. In deciding what to do, I realized I had three alternatives. First, I could return the uterus, suture the abdominal wound and endeavor to produce an abortion. But this was deemed unsafe, as the uterus might not have sufficient contractile power to expel its contents, or if it did, would probably rupture its walls in the attempt. Second, I could incise the pregnant horn, turn out the embryo and suture the incision as in a case of Cæsarean section, but this entailed danger of sepsis, and even if successful, would leave the woman in a position to become pregnant again. Finally, I could do a complete hysterectomy, thereby not only relieving the present situation, but also preventing future complications. The last plan was adopted. The ovarian and uterine arteries were ligated on each side, the uterus and adnexae removed and the pelvic cavity drained by several strips of gauze carried through the vagina. Both of the extirpated ovaries were healthy, but I did not leave one in the abdomen because I have never seen benefit from its supposed internal secretion to the symptoms of the precipitated menopause, and I have seen local trouble follow the practice, due to degenerative changes in a sensitive organ deprived of its chief physiological function. To still further demonstrate my belief that a functionless organ is a dangerous inhabitant of the abdomen, I will state that I took advantage of the opportunity to remove the patient's appendix, although it looked extremely innocent and inoffensive.

The patient made a rapid and uneventful recovery and is now in perfect health.

My post-operative study of available literature in regard to cornual pregnancy has been unsatisfactory. What has been written is to be found either as practical points under descriptions of uterine malformations, or as incidental allusions under the treatment of tubal gestation.

Cornual pregnancy is not an extra-uterine pregnancy, but a true uterine pregnancy, which, by malformation of the uterus, has become pedunculated and walled off from the main uterine cavity. The malformation of the uterus is congenital and due to imperfect fetal development. The Fallopian tubes, uterus and vagina are formed from two embryonal structures called the ducts of Muller. These ducts become fused first at their lower ends. Sometimes one duct fails to develop, so that the uterus becomes one-sided or one-horned—the *uterus unicornis*. Sometimes the ducts may unite only as far as the top of the vagina, thus two distinct uterine bodies resulting, the double uterus—*uterus didelphys*. Sometimes the ducts may unite externally to form one uterine body, but there is no fusion of the cavities which open separately, the *uterus bicornis duplex*.

Sometimes the ducts may unite to form a normal cervix, but the upper part of the body of the uterus is bifurcated, and the two sides diverge sharply from each other, resulting in the two horned uterus—the *uterus bicornis unicollis.*

Sometimes the ducts may unite throughout, but externally on the fundus there is a slight depression, demonstrating the imperfection of development and giving the organ the conventional heart shape—the *uterus cordiformis.*

Finally the ducts may unite so that the uterus presents externally a normal appearance, but contains a septum which divides its cavity into two compartments—the *uterus septus.*

The result of impregnation of an imperfectly developed uterus depends on the degree of malformation, and the site of implanation. Often full term gestation is impossible, no matter what the location of the embryo; again in an unequally developed uterus pregnancy in one horn would probably go to term, while in the other horn it would certainly terminate in abortion of rupture. Impregnation of the two horns at the same time, or at different times, is possible, leading to superfetation. Ross, of Brighton, reports a case in which a patient miscarried of twins, and three months later was delivered of a healthy, full term child. Careful examination showed the existence of a complete double uterus, each side of which had been impregnated. This woman had formerly given birth to six living children and nothing remarkable had been observed at any labor.

Symptoms in cornual pregnancy are absent when the impregnated horn has sufficient capacity to accommodate the growing fetus. Symptoms are present, however, when pregnancy occurs in a horn of the uterus too rudimentary to fulfill the task imposed upon it. The symptoms consist of intermittent pain, due to the contraction of the muscular coats of uterus, bleeding from the vagina, due to the detachment of the decidua in the unimpregnated side; and finally, either abortion from discharge of the contents of the pregnant horn into the uterus, or intra-adbominal hemorrhage due to rupture of its over-distended walls.

Kelly, of Baltimore, in his unrivaled book on Operative Gynecology, states that an accurate diagnosis of cornual pregnancy is always difficult to make. If the case is seen after rupture, there will usually be no time to do more than determine that there is intra-pelvic hemorrhage, due to an abnormal pregnancy. If the case is seen before rupture, two signs will be of value: the first, that the developed side deviates at an angle of from 40 to 60 degrees from the normal position; the second, that the pregnant horn is found by rectal examination to be connected with the uterus by a broad band which is attached at the lower part of the uterine body.

Pregnancy in a rudimentary horn of the uterus usually ruptures from the fourth to the fifth month, somewhat later than is the case with tubal pregnancy. Authorities seem to agree that the same treatment should be applied to both conditions. If rupture has occurred, the abdomen should be opened and the uterus removed. If rupture has not occurred and pregnancy is still in the first six months, a section should be done and the condition corrected. If the diagnosis is not made until after the sixth month, then, in view of the lessened danger of rupture, the operation may be postponed, provided the patient can be kept under careful observation until the child is viable, when it

should be removed by an abdominal incision.

The Causes and Complications of Gout.*

By John M Upshur, M. D, Richmond, President of the State Medical Society of Virginia, etc.

The larger experience I have in the observation and treatment of gout, regular or irregular, I confess the more I feel puzzled to determine the causes which give rise to this affection, and the more do I dread the complicating conditions which may arise, and the more difficult does the therapy seem to be which will give permanent relief. I am fully aware of the popular belief, and the almost universal belief of the rank and file of the profession, that uric acid is the cause, or the presence of it in excess in the system is the cause. But the more I ponder upon this suggestion of causation, the more vague and cloudy does it seem to be. If you will analyze the cases of gout that come under observation, you will be struck with the fact that articles of diet, except in a general sense, are not uniform in causing the trouble in every case, or indeed, in every attack—not that I wish to be understood as not attaching great importance to diet as an etiologic factor.

Typical cases of gout, manifest by painful and swoolen joints, usually of the smaller joints, but not always traceable often to imprudence in eating too rich a diet of red meats, game, wines, malt liquors, etc., are a common experience, and are modified and controlled by restriction or complete abstinence in this respect. But we just as often see cases of irregular gout, lithaemia, just as potent in causing suffering, harder of recognition, and more intractible to therapeutic measures, and just as damaging in results and complications, occurring in individuals, who are remarkably abstemious in their diet, small eaters, yet who live under nervous strain and tension. These, often, are the victims of acid, fermentative indigestion, a toxin being formed in the stomach as the result of the fermentative action, absorbed into the system, poisoning the muscular and nervous systems, and manifesting itself by burning eyes, headache, muscular aching and weariness, mental hebitude, disinclination to exertion, and depression of spirits. True, in these cases you may find excess of uric acid. Haig tells us that it is because the balance is destroyed between the amount taken into the system in articles of food and its product in the system resulting from nutritive changes in the aggregate, on the one hand, and the amount eliminated from the system through the emuctories on the other. He points out the fact that even the menstrual flow is one avenue for elimination, and that when the woman passes her climateric and this avenue of elimination is closed, the woman is apt to become gouty. You will see in the same individual, the eating of an orange, or tomato, or grapes, especially if these be acid, produce gout in some form promptly in a few hours; it may be simply an urticaria, or sense of swelling in the hands and feet, or scalding urine. Another individual of just as gouty a diathesis, will take one or all of these things without this result, or what is more marked, the same individual may take them at some other time and escape all gouty manifestations. Again you find the gouty conditions prominent when the individual has been guilty of

*Read before the Tri-State Medical Association of the Carolinas and Virginia, at the annual meeting at Columbia, Feb. 25-26, 1903.

no indiscretion in diet, but has had overwork, loss of sleep, great mental strain, etc. Strange to say, the relief of these latter subjects is more difficult than when the condition comes as the result of dietetic indiscretion. Uric acid in excess is, I believe, the visible manifest product of gout in all its varieties, but I believe we must seek further for the true cause. When this is determined, I believe it will be found the result of complex processes, involving the function of the liver and kidneys as excrementitious channels—of the subtle process of metabolism as illustrated in nutritive change—of digestive disturbance wherein fermentation and its resultant toxines play a prominent part, and last, but not least, the subtle influence on the nervous system as the storm centre for the explosion of the cumulated disturbance of balance eminating from all of these different directions. This view, to my mind, explains what we must confess to, a most unsatisfactory therapy for the cure or even relief of this affection in all its forms and varieties which so frequently confront us. From the above argument comes the necessary conclusion that our ideas as to the causes of gout are, to say the least, vague and uncertain, and, therefore, if the axiom be true, to cure the disease you must remove the cause, difficulty of cure results because our ideas of the causes acting to produce the malady are cloudy and undefined. I have been at some pains to search the authorities for their views of the causation of gout, and submit to you the result of my research. Haig, who has been so conspicuous for the past few years, is a first class hobbyist. He has said some good things, but never faltered in his firm belief that uric acid in excess, as I have already given him credit, is the sole cause; that its removal from the system and restoration of balance between increment and elimination solves the problem. In our experience as clinicians, is this true? I must say not in my own. Ewart defines gout as primarily "a preversion of nutrition capable of producing structural changes, a functional derangement fraught with organic consequences." Loomis-Thompson, a disease characterized by the deposit of sodium-biurate in the joints and other parts of the body. Heredity, operating sometimes from infancy. More than one-half of all the cases are from this cause, varying in form in different generations. Fundamentally, the result of disturbed metabolism, consisting in defective oxidation of the proteids with faulty elimination of the waste products. Haig claims that drugs that interfere with the elimination of uric acid, i. e., opium, cocaine, antipyrine, strychnia, iodides, nitrates, some sulphates, hyposulphites and chlorides, lithia, mercury and acids are causative. Chronic lead poisoning is often associated with it. A gentleman under my care who has been taking a prolonged course of mercury for syphilis, without other reason, developed an acute gouty pharyngitis, such as I shall subsequently describe as one of the complications of gout. It is frequently associated with diabetes mellitus, due probably to the toxic agents in the blood.

Loomis-Thompson says: "It is often associated with tuberculosis." This fact I question. My observation and experience have convinced me that the two maladies are antagonistic. Roberts lays great stress on the influence of cold; injury to a joint predisposes the malady to focus. Errors in diet, especially combination of acid fruits and wines with excess of sweets, excessive eating of meat, all agents which tend to hyperacidity in the stomach. Sir Dyce Duck-

worth believes that there is present in the gouty a peculiar incapacity for normal elaboration within the whole body, not merely in the liver or in one or two organs of food, whereby uric acid is found at times in excess, or is incapable of being duly transformed into more soluable and less noxious products. He also agrees with Ralfe, "that the failure to complete the uric acid metabolism is due primarily to deficient or disturbed inervation. (Loomis-Thompson.) In all fairness, it must be admitted that uric acid can not now be regarded as the essence of gout, i. e., it must be regarded as a by-product, or as one of several agents contributing to the symptoms of the disease." This statement is supported by Ewart. Other authorities express similar opinions, and Haig has shown "that considerable doses of uric acid may be taken by man per os. without injury." At the time of the acute attack the blood is found to contain much less uric acid than when pain is absent and temperature normal. The inervation of the nervous system is held responsible for defective nutritive changes, and many authorities believe it to be a true neuritis. The effect of this condition is to interfere with the eliminative function of the liver. The sudden onset of an acute attack is considered proof of its nervous origin. Anders is in accord with the authority quoted above. Tyson says, "while over eating, especially of meats and intemperate drinking, associated with luxurious habits which grow out of the possession of wealth, are the most frequent causes of acquired gout, these last are by no means essential." Taking of acids thereby restraining the alkaline solution of uric acid in the blood gives rise to gout, and this is probably the explanation of its etiology from acid malt liquors and wines, E. Pfeiffer holds that it is not the deposited uric acid or urates that give rise to gout, but its alkaline solution in the blood, whereby it proves a source of irritation in the tissues, and adduces as proof of this fact that during an acute attack of gout the elimination of uric acid is increased. He cites further in proof that the administration of salicylic acid gives prompt relief, while the administration of alkalies increases the pain.

Ebstein ascribes the excess of uric acid in the blood to its formation in those parts of the body where it is not normally produced, as bone, marrow, and cartilage. If the blood and lymph become surcharged the balance is restored by increased renal secretion. But if from any cause the lymph moves slowly, the premonitary symptoms show themselves, such as malaise, vague pains in the body and limbs, etc. If a stasis occurs, the acute attack appears. It is not necessary that the joints should be the pivotal points of manifestation, but the same is true if instead we have the manifestations of lithaemia, and the symptoms pointing to some internal organ or viscus.

Ebstein's view that necrosis, or debility of tissue, is necessary to give direction to the deposit of sodium-biurate is sustained by other authorities, notably Ord and Dyce Duckworth. This last authority has taken much pains to establish the neuro-humeral theory of gout. He claims that the gouty disorder is primarily dependent on functional disorder of the nervous system, making it thus primarily a neurosis. This fact is back of the production of uric acid or sodium salts manifest in gouty or lithaemic attacks.

Loewi has contributed some interesting observations on the metabolism of the neucleins. He has demonstrated that neuclein is formed in the body not

only from neuclein, but from other substances. The greater part of the neucleins in the intestines is absorbed in toto. A part is broken up into phosphoric acid, which passes off in the excreta, and nitrogen, which is retained and absorbed. Gouty subjects were noticed to have an increased retention of nitrogen and phosphoric acid between attacks. The excretion of uric acid seems to be dependent on the kind of food eaten. Klemperer says that the increase of uric acid is a secondary matter. Edsall does not believe that uric acid causes any noticeable evidence of intoxication, nor that it produces the decided general symptoms of gout. He believes the main cause of the intoxication to be some substance yet unknown.

Ross states that the cause of the gouty paroxysm is yet unexplained. Gore ascribes the existence of gout not *to the presence of uric acid in the blood, but to a toxin* which is formed by the action of certain baccilli on an altered secretion in the intestine. The effect of this toxin on the liver is the production of uric acid.

Burney Yeo believes irregular gout due to hepatic inadequacy. According to Stengel and Edsall, there is considerable proof that gout is not due to uric acid in the blood. Edsall calls attention to the important fact that uric acid and xanthin bases both come from food. Stengel believes that whatever may be the active cause, diet is the most important factor in the etiology. (Twentieth Century Practice of Medicine Supplement, Walker, pp. 160, 161, 162.)

In view of the statements of so many authorities, sustained by others I have not quoted, my contention of the complexity of causation and obscure processes taking place in the function of metabolism is maintained, and emphasizes the fact that we have much to learn of the etiology of gout in all of its phases. Full enlightenment in this respect being a goal most important of attainment, because of its near relationship, not only to the relief and cure of the malady, but even more important and far reaching than this is a rational preventive treatment, because of the serious complications and sequelae which accompany the malady or follow in its wake. In speaking of the complications of gout, I shall claim full latitude to discuss not only those which appear during an attack, but also resultant complications, or what might be more accurate, technically, sequellae, but for the fact that they are either unusual manifestations or positive results coming from a previous attack of gout as a cause.

Alimentary Tract.—A pharyngitis occurs in gouty subjects characterized by an intensely red throat, oedematus swollen uvula, and sometimes suppurating tonsils, coming on with marked suddenness and without our being able to trace the leisons to any other cause. Gouty pain in the stomach and the pain that attends it we are all familiar with, but we may have complication in this viscus when marked articular gout exists. It may be only an intractible nausea, or digestive disturbance interfering with the taking and assimilation of nutriment, so that the patient sinks into a condition of depression which sooner or later may give a well founded cause for alarm, or hemorrhage from the stomach resulting in death may surprise us when least expected. The following case is illustrative:

I was called November 6, 1902, to see Mrs. ———, aged 36 years. She was a woman of good physique and who had not previously suffered from any serious illness. She had some uterine trouble, simple in character, some years be-

fore, and had borne one child sixteen years before. I found her suffering from an attack of la grippe. She responded promptly to treatment, and at the end of a week she was able to sit up. She had a stomach more or less delicate, which, at times, required treatment for indigestion, but she always got prompt relief. The day after she began to sit up she complained of distressing, typical gouty pains in the balls of both feet and inability to walk. The next day but one remained in bed, typical articular gout developing in her ankles, knees, wrists, elbows and every joint in both hands, all of these joints being swollen and intensely sensitive to the touch. Her temperature ranged from 102 F. to 103 F. She had total loss of appetite, amounting to aversion to food, which, however, she took in the form of broths, milk, eggs, etc., never vomiting, only complaining of flatus and oppression after taking nourishment. She had never had any pain in the stomach. Bowels constipated, requiring a purgative to move them. All of the most approved remedies were exhibited without any marked good result. She suffered most acute pain, exacerbations in the evening and at night, necessitating full doses of morphia to obtain any relief. At my morning visit on December 5th, I thought her better, as did her husband and nurse, and she expressed herself as feeling better and called my attention to the fact that she could move her fingers and that the swelling had markedly subsided in her hands. At 5 p. m., I was hastily summoned by phone and reached my patient, who lived about two miles from my office, in half an hour, to find her just breathing, and she expired in a few minutes, having had a copious hemorrhage from the stomach, without any premonition or warning. It has been suggested to me that she had a latent ulcer of the stomach, which was responsible for this untoward result, but I have never changed the first opinion formed, that it was due to rupture of vein or artery in consequence of a gouty phebitis or arteritis, with softening and rupture. This is the only experience of this kind that I have been so unfortunate as to have.

In tractible fermentative indigestion characterized by great acidity and consequent development of gas, we have a compound disorder, distressing from the gastric standpoint, and supplying a toxine which is absorbed into the system and becomes causative of gout in some other location. The original indigestion is primarily gouty and the product is a fertile source of disturbance to metabolism. Another secondary result is the development of a diarrhœa hard to control, the result of the fermentation in the stomach extending to the intestine. This is different from that other form of diarrhœa, sudden in its onset, colliquitative in its manifestation and serious in prognosis if it occur in the aged or feeble. It is intended to be eliminative by nature, but is none the less harmful for this reason.

Attention has been called to the fact that deposition of the biurate of sodium may be made in the intestinal villi with subsequent ulceration and chronic diarrhœa. Burney Yeo points out intestinal involvement in gout as a cause of appendicitis. We may also have suppurative cholangitis as a complication, and cirrhosis of the liver may develop as the result of the sclerotic change in the arteries.

Duckworth calls attention to the existence of glycoauria, and Prout observed as early as 1843 that many gouty and dyspeptic persons lived for years, unaware of renal involvement, until attention was called to it by the increased

amount of urine voided. This increase in the amount of urine may be paroxysmal, alternating with the joint involvement. The most important of all the visoral lesions of gout are the renal, and we should never lose sight of this organ in our care for those subjects. Degenerative change in the arteries is another important complication, and is of the greatest significance, as it is consequent upon this pathologic change that we have embolism or apoplexy leading up to a fatal result. The establishment of a gouty diathesis should always impress upon us the fact of granular or fibrous degenerative change in the heart walls. Not commonly do we find valve lesions, but these degenerative changes are of tremendous significance, affecting most commonly the left cavities of the heart and may involve all with thinning and dilatation and death at some time when we least expect it. The air passages do not escape the arthmatic attacks. The chronic bronchitis, with which those subjects suffer, intractible to treatment, it must be remembered form a part of renal and cardiac involvement. Some of the most serious manifestations of the malady find expression through the nervous system, neuralgias, especially in the form of gastralgia and enteralgia, with headache, such as described by Haig. Attacks of the fibrous membranes of the brain, secondary, sometimes, to the joint lesions, but I have seen it develop as a primary lesion jeopardizing the life of the patient, sometimes proving fatal, and when recovery does take place, convalescence is protracted and tedious. Sometimes cessation or arrest of a gouty attack may result in the development of melancholia with suicidal tendency, or there may be a violent and dangerous maniacal outbreak, re-establishment of the articular lesions, bringing surcease of the nervous irritation. Obscure cases of loss of sensory power or motion of the lower extremities lasting for a few days or weeks, characterized by formication, tingling, etc., dull aching, sometimes actual pain, often felt in the heels, may be traced to gouty involvement of the membranes of the spinal chord. Undoubtedly the gouty diathesis may be causative of myelitis. I have not referred to the alteration found in the joints, or the deformities incident to protracted and recurring articular gout. They are familiar to you; nor does time allow for a discussion of the intimate and frequent association of diabetes melitus with gout; it has been a matter of common observation. Of the complicating blood conditions I have only to call attention to the variation in the number of red blood corpuscles and the blood impoverishment which comes as the result of long confinement and suffering. The influence of the malady on the skin is marked, and gouty subjects are at times martyrs to most distressing urticaria and eczema.

210 West Grace St.

Glycocholate of Soda.

By Charles I Hill, M. D., Pathologist Mount Hope Retreat, Baltimore.

Glycocholate of soda, as prepared ox bile, has recently been largely used in the treatment of gall stones, chronic constipation, hepatic insufficiency, chlorosis and in those ictoroid conditions which are found in chronic malaria and after the acute fevers where the liver has suffered from the disease. In order to understand the caison d'ethe of its use, it must be remembered that the liver is the largest and most important gland of the body, having a number of important functions to perform. It is both secretive and excretive, besides being most active in the metabol-

ism and assimilation of food stuffs. Consequently should it fail in its functions, serious disturbances must occur.

The bile is composed of coloring matters and the bile salts, glycocholate and lamocholate of sodium, the latter being formed in the liver, according to Crofton, from the action of hypsin or a hypsin like ferment upon hœmoglobin in the presence of glucose or glycogen. The bile salts are the constituents of the bile which hold the cholestine and coloring matters in solution, and should they be absent or deficient in quantity, these substances will not be eliminated and may be precipitated in the gall bladder, forming concretions which cause great suffering to the patients. That the bile salts are of great value to the economy is shown by the provision that they are re-absorbed from the intestine to be re-utilized by the liver and are not eliminated with the feces.

The bile has another function in the intestine, to assist in the absorption of fats as well as perhaps to precipitate semi-digested proteids in the chyle, thereby retarding their absorption and permitting the further action of the digestive fluids. The presence of bile in the intestine is not, however, necessary to life, as animals and patients will live in fairly good health if the total quantity of bile is eliminated through a fistula, proving that the excretory function of the bile is the most important. This is further shown by the toxic effects of the bile in jaundice, where from occlusion of the ducts it is retarded by the liver and forced back through the lymphatics into the general circulation. It is evident that the qauntity and quality of the bile, as well as its free eliminations, are of vital importance.

Recent experiments have shown that none of the so-called chologogues of the pharmacopoea increase the flow of bile and that gylcocholate of soda is the only drug at our command which will increase the quantity both of fluid and solid constituents of the bile eliminated.

The physiological action of glycocholate of soda has recently been investigated by Crofton, who gives the following results:

1. Injected even in small doses into the blood stream they (the bile salts) produce a widespread disintegration of the red corpuscles with a liberation of hoemoglobin; brought into contact with cells of the body, they cause their disintegration.

2. They have a chologogue action, in fact are the only substances known to possess the power and actually cause an increased flow of bile, both solid and liquid constituent being increased.

3. The presence of bile in the blood acts as a stimulus to the liver cells.

4. In small doses they aid coagulation.

5. In large doses they arrest coagulation.

6. In very small doses they act as vasodilators.

7. In large doses they act as vasoconstrictors.

8. They reduce motor and sensory irritability.

9. They slow the heart beat by direct action on the heart muscle and the cardiac ganglia.

10. They act on the higher cerebral centers, causing coma, stupor and death under physological conditions.

Nos, 1, 2, 3, 4 and 6 may be considered as their normal action, while 5, 7, 8, 9 and 10 are pathological and only occur when they are in excess in the circulation.

It is, however, with their chologogue action that the liver is directly affected, suppression of the elimination of bile producing cirrhosis and all its conse-

quent ills. The bile salts are the solvents for the substances to be eliminated; their quantity may be reduced in two ways, by arrested formation and by failure to be reabsorbed from the intestine. The quantity normally formed in the body must be very small and as yet we have no very definite knowledge on the point. The failure of reabsorption takes place in diarrhœa when the intestinal contents pass too rapidly from the body. As bile has a decided action in increasing peristalsis and preventing constipation, it is probable that the constipation which so often follows an attack of diarrhœa or a purgative, may be partially due to the elimination with the fœces of the bile salts, preventing their absorption and consequently reducing the quantity of bile excreted by the liver. In cases of chronic constipation, especially those with the purgative habit, gylcocholalate of soda administeredover a considerable period in doses of 15 grs. per diem will often overcome the condition completely.

The principal function of the intestinal glands is to secrete sodium corbonate into the intestine, which, in the presence of bile, dissolves considerable amounts of fatty acids, which solution cannot be accomplished by the sodium carbonate alone; the carbon dioxide of the sodium carbonate has a greater affinity for the sodium than have the fatty acids, the neutral salts of which bind more readily with a second molecule of fatty acid, and although in acid form, the cholates of the bile dissolve the fatty acids holding them in loose combination, thus enabling them to react with the sodium carbonate and the already formed neutral soaps. As the cholates themselves undergo no decomposition, a small portion have the power to bring about the formation of a large quantity of fatty acids into neutral and acid salts; therefore, the action of the bile on the intestine is to make the fats soluble in water. The want of the proper assimilation of fats is a very frequent cause of various cachexias which are not generally understood. Patients, on enquiry, will often state that they are unable to eat fat on account of the digestive disturbances it produces, or that they have an aversion to fat which is probably the result of their dyspeptic experiences. In tuberculosis this repugnance to fats is very marked, and in Guosel's treatment of this disease the addition of sodium carbonate and glycocholate of soda is of very great assistance. In diabetes where it is desirable to increase the assimilation of fat to take the place of the carbohydrates which are forbidden in diabetic diet, the same treatment has been found of great advantage, overcoming the repugnance of the patient to the fatty diet.

In malaria, typhoid fever, and in fact all the acute diseases, the liver is put to very considerable strain, as its function is the destruction and elimination of the toxines produced in the disease. The liver cells become fatigued and the function of the organ is impaired; this is seen by the dirly yellow icteroid condition of the skin which either accompanies or follows these diseases. By the administration of glycocholate of soda the flow of bile is increased, the liver as it were, purged of its accumulated toxines and the liver cells stimulated to greater activity. In these cases a week or two of treatment with glycocholate of soda will produce a marked improvement in the condition of the patient; the malaise, depression and want of energy will rapidly disappear, as will also the pigmentation of the skin.

It is in the treatment of hepatic colic that glycocholate is of the greatest use; gall stones are composed of choleste-

rine and bile pigment, the latter usually in the form of bilirubinate of calcium. These substances are soluble in the bile, provided that there is sufficiency of bile salts; it is of little consequence if there is a nucleus in the gall bladder around which cholesterine may precipitate, as if there is a sufficiency of bile salts the cholesterine and the bilirubinate of calcium will not be precipitated. If a gall stone be placed in a 1 per cent. solution of glycocholate of soda in the thermostat at body temperature, it will very soon become so piable as to be easily crushed between the fingers, and there is no reason to suppose that this solvent action of the bile salt should not be exerted in the gall bladder as well as in the thermostat. The present treatment of gall stones seems to be surgical operation, which, though it may remove the stones already formed, does nothing to remove the condition which caused their formation, and further, one in fifty of the cases operated upon comes up for a second operation owing to the formation of fresh calculi. The mortality in these operations varies from about one per cent to 25 per cent, according to the nature and severity of the operation. There are cases in which operation is justifiable on account of the serious condition of the patient, and when the duct is occluded with a large stone; but if the diagnosis is made early, the administration of glycocholate of soda in gradually increasing doses up to 1 or 2 dr. per diem, the stones will become soft and pliable, and finally dissolving entirely without risk to the patient. In remittant hepatic colic the drug is almost a specific, patients very rarely having an attack after commencing treatment. In a case which had had bi-monthly severe attacks of colic for many years, and who had been under all the routine treatments without avail, commenced taking the glycocholate in 1897 and has never had an attack since. He takes about 2 dr. per month regularly as a prophylactic. In another case in which the diagnosis was made at the first attacak, the patient took the treatment for nearly three months, when oclusion of the duct occurred, necessitating operation. In the gall bladder there were between seventy and eighty small chlotesterine stones, all of which showed evidences of solution, they being soft and friable, crumbling easily between the fingers. It is probable that in this case, had the duct not become occluded the stones would ultimately have dissolved up completely.

In all these cases of hepatic troubles the effect of the glycocholate is greatly increased by the administration of large quantities of water and of sodium bicarbonate; it is usually impossible to get a patient to drink water as mediciine, but by ordering 5 or 10 grains of the bicarbonate in a pint of water half hour before meals, the patient not only takes the water, but the bicarbonate dissolves any mucus and removes and debris that may be left in the stomach from want of mobility of that organ; in fact it washes out the stomach three times a day in a more effective manner and with less inconvenience to the patient than stomach lavage with the tube.

The dose of glycocholate of soda (Hynson & Wescott, Baltimore) is fifteen grains per diem, and upwards, though the minimum does is usually sufficient, as the drug should be administered over a considerable length of time, its effects not being observable till after a week or two of treatment. From its bitter taste it can only be administered in capsules, and even then it sometimes produces nausea for the first few days, which disappears if the medicine is perserved with, a few grains of magnetism oxide with the capsule will

often prevent the nausea. Occasionally it produces diarrhœa at first, but after a day or two this also subsides.

Among the insane, where diseases of the liver are the rule, at least in melancholia, 20 per cent. of the cases coming to autopsy having gall stone, the drug is of especial value as it not only removes the hepatic insufficiency which is a characteristic condition in melancholia, but it also improves the constipation which is always so troublesome a symptom among the insane.

From a very considerable experience in the use of glycocholate of soda the writer is convinced that it is of the greatest value in all cases of hepatic insufficiency and that it is almost a specific in hepatic colic. It is contra-indicated when the duct is occluded, as an increase in the amount of bile during this condition will increase the amount in the circulation.

The Mechanics of Mercury in Syphilis*

By Thomas W. Murrell, M. D., Richmond, Va., Lecturer on Dermatology and Assistant to the Chair of Genito-Urinary Diseases, University College of Medicine.

Mercury, as used in the treatment of syphilis, is one of the most ancient of remedies. It was first used by the Chinese as a therapeutic measure in syphilis, and down through the ages up to this time it is the only drug that has answered the requirements as a means of treatment of this very ancient disease. Indeed, mercury has been classified as the one of the two known specifices, and he is either a charlatan or an ignoramus who would dispute its preeminence in the therapy of syphilis. But, though this be admitted, there is a wide difference in the methods of treatment and the choice of the form of the drug to be used, and as to the last of these two, viz., the form of the drug to be used, in this paper we will try and see by logical conclusions which is the best form to administer and our reasons for doing so.

First, let us look at the pathology of the disease. As in most things truly great, it is exceedingly simple and consists solely of "an active proliferation of the normal germinal cells of the part." When the virus of syphilis is introduced into the body, there is on its development a stimulating effect produced on all the cells of the economy, some parts being affected more than others, and they begin to proliferate with exceeding rapidity. The lymph glands are attacked first and there is the familiar symptom of their general enlargement. As the source of inoculation is usually about the genitals the inguinal glands are the ones, of course, usually first affected, but if the inoculation is elsewhere, the glands nearest the site of entry of the virus are the first to show enlargement. Then, after the poison gets into the lymph channels, it travels onward through the thoracic duct and into the subclavian vein, where it is absorbed and finally affects all the tissues of the body. Yet, let it be thoroughly understood, there is no inflammation in the pathology of syphilis and the enlargement of the glands presents no sign of inflammation, the swelling being due to the increased number of cells in the gland and not to the swelling of the cells alone. This explains why the glands are not so much enlarged as they are hard and dense, and why the induration may remain after the initial lesion, the chancre, has disappeared. Also the same pathology applies to the eruption which is not due to

*Read before the Richmond Academy of Medicine and Surgery Jan. 27, 1903.

the excretion of the poison through the glands of the skin, as in the common belief among the laity, but is due to the proliferation of the epithelial cells, and this produces the shot-like feel that the eruption possesses in so many cases.

The lymphatics are affected, and the proliferating cells blocking up their channels, their function as sewers of the body is abolished, but the proliferation goes on elsewhere in the body, and the masses of cells not being carried off, make their appearance as gumma in the tertiary stage. This is a result of syphilis and not a manifestation of the disease per se.

Now that we have looked into the pathology of this condition, I lay down a dictum somewhat surprising to the ordinary practictioner, to-wit.: Syphilis is as much a self-limited disease as measles, and that mercury has no antitoxic action upon the syphilitic virus. What then is its action? How are the results produced? Solely by mechanical means. We have seen that by the proliferation of these cells in the lymph channels that there is a blocking up of these sewers, these garbage carts of the body. Potassium iodide has a stimulating effect upon them and since they are already stimulated to the limit by the virus of syphilis, this drug as a therapeutic measure in the active stage of the disease, not only does not good, but is capable of harm; you would be simply adding fuel to the fire. What you do desire is the patency of these lymph channels, something that will so keep them open that their function may go on uninterrupted.

If a gutterpipe extending from the roof of this house to the ground were clogged up with filth so that the rainwater could not pass through, and you took a leaden ball about the size of the pipe and dropped it in it, by its own weight it would clean out the pipe and by opening up its channel, restore its function. So in syphilis; the globules of mercury, in their passage through the lymph channels, carry out the detritus before them, and the function of the channel is preserved. If mercury is given in the crude form by mouth, it passes through the intestinal tract unchanged, but if subdivided, it is absorbed and has its effect; the finer the subdivision the quicker is its action made manifest and the more thorough the results. This is frequently practiced when in prescribing calomel you direct that it be tincturated with milk sugar, the fine sub-division of the calomel being the principle you are acting upon.

As a concrete drug, mercury reflects all light and appears as silver to the eye; divided finer it appears white; finer still, it takes on a grayish tinge, and fine as it can be divided, it reflects all light and appears black to the eye. Give the crude drug, and, as we said, no results are produced, but give a coarse trituration to one person and a fine trituration to another for some length of time. If under autopsy a microscopical examination is made many more globules will be found in the glandular tissues of the person who took the fine sub-division than in the one to whom the coarse preparation was given; the drug always appearing as globules under the microscope crowding each other through the finest channels. This teaches that the finely divided forms of the drug are the ones to use, because more is absorbed and quantity of absorption is the end to be attained.

The forms of mercury most used are the protoiodide or the biniodid, the bichloride, calomel, blue ointment and hydrarg. cum creta, or mercury with chalk. We will take them up separately.

The protoiodide is the most used and at once the most useless. It is given in the mistaken idea that iodine does good, whereas we have seen that by stimulating the cells that are already over stimulated by the virus of syphilis, that in the active stage it does harm. Dr. J. M. Julien, one of the French authorities, in the *Journal de Maladies Cutanus et Syphilitigues,* published lately, characterized the protoiodide as the "father of stomatitis," and I have seen in a clinic an iodine eruption in a person who was taking the protoiodide under a mistaken diagnosis of syphilis that simulated the syphilitic eruption in appearance and symmetry. Its action is uncertain, and as it was once a fad among the leading syphilographers, so now a reaction has set in and it is beginning to be looked upon with suspicion.

At present the bichloride is being highly extolled for the injection treatment, but per orem it has not proved satisfactory, being too severe a form of the drug. The blue ointment, from its fine sub-division when used by injection, is perhaps the best, but the inunction treatment is not always feasible or desirable.

This leaves us to the mild chloride and the mercury with chalk. Of these two forms, more mercury can be given than in any other form by mouth, and we have seen that quantity of absorption is the goal toward which we are striving.

In giving these the usual tonic treatment is carried out; increasing the dose to impending salivation and then cutting down to one-half for the regular dose to be taken from two to three years. At the end of this time, syphilis being worn out and dead, potassium iodide is indicated to stimulate the lymphatics and carry away the results of the disease, as the lymph channels you have kept open can be physiologically active.

It is unfortunate, I think, that mercury in any form does some good because thereby we are deceived, but careful clinical observation has proven that, in its milder forms, the drug finely subdivided gives the best results.

Bibliography.—The Mercurials, S. V. Clevenger; *Journal American Medical Association,* February 22 and 29, 1896; White and Martin; G. Frank Lydston.

621 East Franklin St.

DISCUSSION.

Dr. Stuart McGuire did not agree with the theory of Dr. Murrell, nor with the mechanics of mercury in syphilis as described by him. He believed mercury to be a germicide, and syphilis a germ disease. He relied largely upon the protoiodide, the salt that Dr. Murrell condemned.

Dr. Greer Baughman said, regarding the pathology of syphilis, that he had never found a globule of mercury in the tissues. He had examined the kidneys of syphilitic persons and found that the inflammation resesmbled that of nephritis. The most characteristic pathologic lesion of the disease was thickening and hardening of the arterial walls. The lesions of syphilis and tuberculosis were in many points so similar that a differential diagnosis could with difficulty be made; but the pathology of syphilis was still largely unknown. He had obtained good results in the treatment of the disease from the use of the protoiodide of mercury, which was his stand-by.

Dr. D. Meade Mann emphasized the existence of contraction and hardening of the arteries in syphilis, and, therefore, gave the nitrites in conjunction with mixed treatment in brain troubles due to syphilis. He did not think it proper to fix a definite time for beginning mixed treatment, being guided by the symptoms. He thought the

quickest way to get the symptoms under control in severe cases, was by inunction; in some cases, fumigation acted well. He saw no objection to the use of the protoiodide.

Dr. Murrell, in closing the discussion, said that the views he had presented were not original with him; and that the late Dr. Lewis Wheat had agreed with them. Dr. Murrell remarked that the syphilis of today was attenuated and that in the sixteenth century the secondary and tertiary stages were coincident; but even so iodide of potassium was indicated only for the latter and never for the former. Admitting that the pathology of syphilis was unknown, it must be admitted that gumma formed and was carried off by the lumphatics. If the arteries thickened, why not the lymph channels? The latter became clogged up. The latter should be kept open with mercury that they might do their work and keep gumma from forming. The use of the protoiodide was no defense of it.

SELECTED PAPERS.

The Practice of Medicine as a Scientific Pursuit.

By F. Park Lewis, M. D, Buffalo, N Y., Member of the American Medical Association, etc.

When we think of the various sciences and their progress during the world's development, we realize that the one fixed fact in the sphere of knowledge is that there is a possible beyond to everything, that nothing is so sure within our grasp but that to-morrow may change its whole aspect to us. What we regard as a fixed scientific fact to-day may come back to us from another's hands with such additions or subtractions as will give it a wholly new meaning.

The "facts" of science have been thus progressive, and we conclude, therefore, that it is not so much the collections of facts in any branch of knowledge, as the attitude of mind toward these facts that gives it, and the men who concern themselves with it, the right to be called "scientific."

I mean to say that any subject may be so engaged in as to become either an art or a science, while an art or a science may be pursued in such a manner as to render it neither artistic nor scientific. A man may call himself a scientist, may even get himself called so by a considerable portion of the world's students, and yet be unscientific both in mind and method. The primary characteristics of a truly scientific mind are openness, fairness, freedom from prejudice; without these how may any man find truth? The scientific method is also characterized by the clearing away of the personal equation, and not all who would be called scientists are great enough to pursue an end by this means. Yet the tendency in all modern thought is toward this direct, open, impersonal, systematic, but mobile, in other words scientific attitude. We find it influencing not only intellectual but material progress. Not only has the higher criticism modified the belief of the Christian world in regard to religious questions; not only has the reluctant acceptance by our fathers of the Darwinian theory given an entirely new outlook to the youth of the present generation, but the politics of to-day tends toward

a foundation of economics, and economics is less theoretical, and more dependant upon social studies of the more exact and careful nature. Business also is employing scientific measures, and the success of the great industries that are the marvel of the century is largely due to this fact.

America is rapidly taking the lead in the great enterprises of the world, gaining control of its markets, influencing the policies of nations, becoming not merely a power but a dominant power, because she is applying practical scientific methods in every field where energy is to be spent, and because she is quick to feel every change of pulse and to meet varying conditions as they come.

Times change and men change with them. Methods and policies that were sufficient a few years ago, if still persisted in, are seen to be pathetically inadequate to-day. We could not, if we would, change these things. It makes, practically, little difference what we do individually. We may modify, but we cannot prevent the world's advance. We cannot push back the coming tide, but we may take things out of the way that might be caught by the inwash of the waves.

The history of medicine has been a mirror of the thought of the age. As there was a time when a "Congress of Religions" would have been impossible, when a congregation of Baptists holding church services in a Jewish Synagogue was unthinkable, so there was a time when the idea of medical unity was a chimera, beautiful in theory but out of the question as a possible reality.

The waves of progress that have rolled steadily on, have, at each successive ebb-tide, carried some remnants of tradition, of prejudice, of personal feeling. The medical profession of to-day is imbued with a spirit that half a century ago could not have been dreamed of. Difficulties that seemed insurmountable have been overcome, not merely in the way of technical achievement, but in the many fields where exact investigation and infinite pains have been rewarded by discoveries of constant benefit to the suffering. But almost better than these, because it has made such achievements possible, is the habit of thought which has been attained; the open, fair, unprejudiced, impersonal, exact, in other words, scientific, attitude of mind which has become characteristic of the medical profession, as it has of the leaders in every branch of the world's progress.

Again, the spirit of the age is co-operative. It recognizes the fact that twenty men working together have more than twenty times the strength of one man. Where a business firm once employed ten men and had two partners it would now have twenty partners and employ a thousand men.

In organization and co-operation is strength. This is a modern watchword. One may or may not believe in the amalgamation of great interests, but it is going to be tried. We might put out a hand to prevent it, with the result that we would doubtless lose the hand and nobody be any better off in consequence.

The benefits of organization and of co-operation are unquestionably many, and they are going to be tested as they have never been tested before, for the tide in that direction has just set in. It has long been apparent that medical co-operation was sure to come in the near future. The mental attitude of the profession made this certain. The whole question of school will ultimately be done away with, because it is

unscientific. A method of medical practice is capable of demonstration or of disproof, and for a whole profession to be divided on such a point is too absurd to much longer be permitted.

But demonstration or disproof are not the work of an hour, and for many years to come the members of the profession may hold different views and use various methods in their work. There is no reason, however, why the men in the profession should not meet the spirit of the times in this, as it has in other ways, and co-operate heartily in the advancement of their common interests and the solution of their common problems. It would give a strength and a dignity to the profession to be thus united that is impossible to any branch of it in a dismembered condition. A division of strength is an obstacle to the greatest achievement, and is seen to be in every branch of the world's work. The time has come now when the far-seeing in the medical profession perceive this, and know it to be true. They know also that because men differ in some of the essential details of their work, is no reason why they should fail to take advantage of the great union, which does not consider what this man or that believes, but only *"has he a proper medical training and the character of a gentleman?"*

Beyond that no man dictates to another how or upon what principles he shall do his work, because medicine has not become an exact science, and will hardly become so while no two human machines are built alike, or require precisely the same handling.

If all qualified medical men were to unite in one great association, it would not only add to their own individual strength and to the working power of the whole, but it would be the *step into rank that would put the whole profession into the line of progress.* This is not only true, but it is going to be done. If not now, then after the waves have done their work. That which stands in the way is not difference of opinion or of practice. It is tradition, it is prejudice, it is personality, it is desire for victory. Many can see far enough into the future to realize a little of what the result will be when these are swept away. Some few will help, and all the years to come will be their debtors, because, until this union is accomplished, individual men may work on scientific lines, the majority even may be true scientists, but the profession *as a whole cannot be looked upon as a scientific body while it is divided by a question of belief.*

The demonstration of the universality of the dual action of drugs has not yet been made to the satisfaction of the entire profession, but it is difficult for a man or a body of men to demonstrate anything to other men whom they rarely, if ever, meet.

If a theory is demonstrable and its acceptance a thing to be desired, the way is surely not to build, or to perpetuate, barriers between those who hold this belief and the rest of the world. If those whom the bigotry of a past age excluded from comradeship with their fellows did not build the barriers, those who have succeeded them do to-day perpetuate these barriers if they are not willing to have them abolished. The breaking down of the barriers which have existed between the different branches of the medical profession does not mean that all its members shall be called upon to think alike or to adopt any uniform methods of work, or in any way to change their beliefs or their individuality or even their associations. That they should not be called upon to do this, is indica-

tive of the broad spirit of the times and marks the passing of intolerance, the coming to the fore of truly scientific spirit.

If the time has come when it is possible for all properly equipped gentlemen to join in one organization, the failure to do this throws the burden of explanation upon those declining. It has been said during the past few years by many physicians that they could not join a general medical organization, because it would not grant them "freedom of thought and practice." If the level has been raised so high that there is no longer any question of "what do you *think?*" but only "what do you *know* and what can you *do?*" this one insuperable obstacle to a united profession is taken away.

This is a very high stand to take, and to many it will seem an altruistic one. But it is the only truly scientific position.

A belief is not a voluntary thing. One may remain in ignorance because of unwillingness to put oneself in a position to gain facts. But the possession of the same facts will not always lead two men to the same conclusions.

Is it not Heine who says "we do not possess our beliefs, our beliefs possess us?" Having certain data, it is not within our power to say that we will or will not believe the conclusions to which these data have led others. Therefore, neither the acceptance or denial of a *belief* can be the basis upon which a scientific society admits or denies admission to a scientific man. At the same time the practice of medicine has so broadened and enlarged during the life time of most of us, that the giving of drugs, important as this is, has come to be a very small part of the measures used by physicians in the treatment of disease. We have come to realize that the normal condition of the human economy tends to maintain a harmonious adjustment of all of its functions. When these functions have been disturbed, the first effort of the modern physician is to find where a disturbing element has entered.

Has the physiological chemistry been so imperfectly performed as to produce a toxine? Is faulty metabolism due to dietetic errors? Has the vulnerability of the system been so great as to make germ infection possible? Have psychological conditions disturbed functional activities, or has the nervous tone been reduced by some unsuspected reflex? Into all these fields of investigation the physician must go, correcting conditions which may have given rise to disease, and all these precede, and sometimes render unnecessary, any drug giving.

The first question that the careful physician of to-day asks himself is not "what shall I do to make this man well?" but "what has he done to make himself sick?" Very few, therefore, of the men who differ from their fellow practitioners in the matter of therapeutics only, are willing to be called or to call themselves sectarian; they do not feel themselves to be so.

Differences of belief have been emphatized long enough; it is now time to emphasize *that which we hold in common.*

But upon those of us to whom a therapeutic law, immutable and invariable, is not a belief, but a conviction, rests the duty and responsibility of so formulating it that its demonstration must of necessity be accepted by the scientific world.—*Med. Times.*

The Treatment of Pneumonia.

Sir Dyce Duckworth, in the *British Medical Journal* of November 15, 1902,

in speaking of the therapy of this disease, mentions two symptoms in connection with the nervous system. First of all, as to patients who become delirious at night through exhaustion. That, of course, is more apt to be seen in elderly patients and those who have been intemperate in alcohol. Pneumonia in the drunkard is almost certainly a deadly disease. Double penumonia in the drunkard is absolutely fatal; there is no chance for him. Hughes Bennett taught that acute pneumonia in a previously healthy young man or young woman is usually recovered from; but the case is very different if you have an aged patient or one degenerated by abuse of alcohol or any other chronic disease. It should be noted that the average age of the patients of Bennett's favorable statistics was 30 2-3 years.

Influenzal pneumonia is a very severe form, especially fatal in elderly people. It was so in the last epidemic of influenza. A more important nervous symptom is that of insomnia. The patient cannot sleep, and that, toward the crisis, about the sixth or seventh day, is a very grave matter. It is most important to secure sleep, as the nervous system is exhausted and the patient is worn out with the labored breathing and high fever.

This opens up the debated question as to the use of opium in pneumonia. There are some authorities who maintain that the use of opium in pneumonia is very beneficial. Others aver that the effect of opium is to stop the excretion from bronchial tubes, to check the power of coughing and the expectoration, and to stupefy the patient to such an extent that he does not feel the need of coughing; a further risk arises from the condition of the kidneys, which may be unsound and unable, therefore, to do an adequate amount of excretory work. It does not do to be too dogmatic, and say that in all cases of pneumonia the use of opium is good or bad. There are some cases in which it is beneficial—those cases in which there is no reason to suppose that the kidneys are involved. A very good plan is to give morphine in small doses with compoung spirits of either; fifteen minims of liquor morphinae, with one drachm of compound spirits of ether (Hoffman's anodyne) is an excellent soporific, and will make the majority of these patients sleep. If that is not sufficient, the dose should be repeated. The morphine and ether sustain the action of the heart, and also promote sleep.

The next serious thing in pneumonia that we have to fear, more especially after the age of forty, is failure of heart power. In the majority of cases the heart is unable to stand the strain put upon it by the disease. Where does the strain come from? You can imagine the breathing space in the lung being so diminished that there is comparatively little left. The exudation which fills the air sacs presses upon the small vessels, and so prevents the circulation going on freely, and therefore the blood is thrown back upon the right side of the heart and causes engorgement there. Thence it is thrown back into the venous system, and this becomes engorged. The result is that the patient becomes cyanosed, and sometimes even jaundiced. This is a very dangerous state of matters; not many hearts can bear that stain for long, and if the organ is originally weak, owing to age or degeneration, the strain will prove too much for it and the patient will die. This is a condition which may be relieved by blood-letting; a small bleeding to eight or twelve ounces in such a case may be very useful. Dry pleurisy is a constant accom-

paniment or part of pneumonia, and you may give relief to the pain of it by the application of two or three leeches.

If the heart begins to falter and the pulse becomes irregular and small—a condition which you may expect in elderly people—you may avert further failure by several measures. First of all you give oxygen. Do not put that off too late; it is often brought in as the last resource. You had better employ it too soon than too late. If the patient inhales oxygen at intervals for ten minutes at a time, that may help him on materially. Again, if the heart begins to fail, you may give great relief by injecting four or eight minims of liquor strychninae under the skin. This has a marked power of stirring up the cardiac centres, and by this means many people have been saved from death. The author has not found digitalis as useful as strychnine. Now is the time also to use musk. There is only one objection to it, its costliness. We do not use more than a grain or two at a time, but we ought to use more. The old physicians used nine to twelve grains of musk made up in the form of a mixture with syrup and mucilage, and without doubt they got better results than we do with the small doses. When musk is really wanted it is well worth the money. The author once had evidence of the value of musk in pneumonia from a Sister in John Ward, a most observant and careful nurse. She used to say to the house physician, "I think the time has come for musk, sir." She had noticed the good effects of it. We generally combine Hoffman's anodyne with tincture of musk and repeat the doses at short intervals.

Of the secondary penumonia, the author does not say much. The pneumonia which accompanies rheumatic fever he does not think is as severe or as frequent nowadays as it used to be. Treatment by sylicylates may perhaps account for this. In this form we find everything classical, except that the patient does not spit up rusty sputa.

Pneumonia may be dependent on gout, and in other conditions may be quite unconnected with the pneumococcus or staphylococcus infections. It is quite certain that pneumonia may occur as a form of visceral gout and replace articular manifestations of the latter.

Note once more that the treatment of pneumonia is strictly the treatment of the patient suffering from it. It is a simple disease in children; it is not a dangerous disease in the young, or in those who have been previously healthy; it is more dangerous to those who have reached forty years of age; it is extremely dangerous in the old, and absolutely fatal in the drunkard.

You may say that the conduct of a case is very simple and demands little more than the practice of common sense. A great deal may be done for this condition by trying to anticipate what may occur. With regard to the use of stimulants there is no routine practice. You should give them in pneumonia just as in other diseases; if they are not wanted, you do not give them. Many cases of pneumonia in the young are best treated without any stimulants at all. But if there be engorgement of the side of the heart, a high temperature, a rapid pulse, the first sound of the heart barely audible at the aortic area (Stokes' indication), stimulants should be given. In the majority of cases two or four ounces of brandy is sufficient in the course of each day. The author has known patients to require even twelve ounces of brandy and they could not have done without it. Your hands are not tied, therefore, in the matter of administering stimulants. It is

sometimes more important to give the patient as much pure water to drink as he desires. This simple matter is too often omitted from the treatment of all febrile conditions.

We may begin our treatment with a mercurial purge, and probably we shall not require any other aperient throughout the case. The subsequent treatment consists of a simple saline, to which some cinchona may be added later on, a diet of milk and beef tea, and above all, watchful and careful nursing. In winter-time successions of hot poultices may be applied to the affected side. In hot weather these may be replaced by cotton-wool sprinkled with spirit of camphor. The author has no liking for a steam-laden atmosphere in cases of pneumonia if the sick room is properly ventilated. Study the temperature chart, the condition of the heart and anticipate failure of heart power, more particularly in cases where the venous circulation is engorged.—*Therapeutic Gazette.*

NEWER MATERIA MEDICA.

Common Sense Tonic Medication, With Illustrative Cases.

By A. W. Duvall, M. D., Philadelphia, Pa.

Every physician of experience has many times felt the need of a satisfactory method of treatment for the exceedingly common class of cases attended with impoverishment of blood, exhaustion of nervous force and the constitutional condition designated malnutrition. Any or all of these conditions may exist independently, may co-exist, or may be part of organic diseases of the respiratory, nervous or digestive systems. It can be safely stated that the ordinarily employed tonics and reconstructives, iron, arsenic, strychnine, cod liver oil, etc., fail in the majority of cases to effect the desired results. It is soon apparent that these remedies are not absorbed, or if they do enter the system, fail to bring about the desired changes in the blood, the nervous system and general nutrition. Reasoning *a priori* it seems that the most rational and scientific method of treating these cases is by fostering the patient's nutritive functions; and this can only be accomplished by directing treatment first to restoring the enfeebled digestive organs, so that food, the natural reconstructive and tissue builder, will be digested and assimilated. This may be said to be the first and most striking indication for treatment, inasmuch as there are always present the symptoms of atonic dyspepsia with loss of appetite, and an absolute inability on the part of the patient to take sufficient nourishment to replace the increased waste of tissue brought about by the disease processes. Most so-called tonic-nutriments and reconstructives have little or no influence upon the most important functions. Iron is administered in enaemia because that element is known to be deficient in the blood; the fact that the deficiency is iron and impoverishment of the blood is but a part of a clinical condition, of which general tissue impoverishment—malnutrition—is the essential and underlying feature, seems to be disregarded. Cod liver oil, according to both scientific in-

vestigations and practical experience, is of utility only as a food fat; aside from this its therapeutic, i. e., remedial value, is practically nil. Strychnine is a stimulant to the nervous system, and, according to Professor Hobart A. Hare and numerous other authorities, is positively contraindicated in most conditions which are regarded as requiring tonic medication. What is most needed is an "all-around" tonic, which attacks the pathologic conditions upon the rational scientific basis of restoring tone to the general system—blood, nerves, organs, nutrition, by an imitation of nature's methods of restoring waste of tissue and impoverishment of nervous force, i. e., by coaxing the abrogated digestive and assimilative functions—and thereby the general nutrition—to resume normal physiologic activity. This is all the more imperative when one considers that the various pathologic conditions associated with organic diseases and impoverishment of blood and vitality, have the one essential feature in common, i. e., malnutrition. The correctness of this reasoning is amply proven by an extensive experience in treating a large number of cases of exactly the kind which every physician regards as requiring tonic treatment. The following cases are selected at random from a large number of similar ones, and are cited merely to illustrate the foregoing remarks upon what constitutes both rational and scientific tonic medication. The remedy selected was a mixture of gentian, taraxacum, dilute phosphoric acid, glycerine, with a small amount of sherry wine and carminatives (furnished under the name of Gray's Glycerine Tonic Comp.) all of which ingredients have a well known and universally asknowledged tonic influence upon the digestive and assimilative functions. Particular attention is directed to the diverse character of the cases, the diagnosis in each of which was perfectly clear.

Case 1. Female, 17 years of age; mill operator; had gradually lost flesh and strength for a period extending over about seven months. At the time of beginning treatment she presented the picture of typical chlorosis. Her skin was a waxy green, her conjunctivae of sky-blue color, and she was emaciated to a marked degree. Menses had not been present for four months. The hæmoglobinometer in three separate examinations during a period of ten days showed remarkable corpuscular impoverishment—an average of 42 per cent. The subjective symptoms of muscular weakness, with mental lethargy, were most pronounced. She had been unable to take food, except of fluid character, and in very small quantities, for several weeks. Appetite was totally absent, and milk and broths, even in moderate amounts, occasioned gastric distress and were frequently vomited. She had at times paroxysms of pain resembling gastralgia. Constipation was a marked feature. Physical examination of the thorax revealed loud, systolic, blowing murmurs—hæmic—over the entire precordia, most pronounced at the base of the heart and in the carotids. There was prescribed in addition to rest, frequent bathing, peptonized milk and Blaud's mass in ascending doses. Two weeks' treatment by these measures failed to increase the proportion of hæmoglobin or relieve the general weakness and marked disturbances of the gastric functions. She was then placed on Gray's Glycerine Tonic Compound, two drachms four times daily, and the iron was discontinued. At the expiration of seven days she had desire for food, which was apparently digested and assimilated. She was given fluid

extract of cascara sagrada in fifteen-drop doses at bed time, in order to overcome constipation. Her appetite gradually returned; she was able after two weeks to take lighter articles of diet—eggs, toast, scraped raw meat—and she had consequently gained strength. Treatment by rest, bathing and the administration of Gray's Glycerine Tonic Comp., was continued for eight weeks, at which time she had gained fourteen pounds in weight, was entirely free from gastralia and the symptoms of atonic dyspepsia, and her hæmoglobin had increased to 82 per cent. She has had slight menstrual show, and she is now so *far* convalesced that she is able to indulge in a fair amount of mental and physical exertion without experiencing undue fatigue.

Cases 2, 3. Were patients of the clinical character usually designated general debility in which, in addition to disorders of metabolism—manifested by loss of energy and body weight—there were particular enfeeblement of the digestive functions amounting to well-marked cases of atonic dyspepsia. Two of these cases had been under various tonic treatments for periods varying from two to four months. In accordance with Allbutt's dictum, concerning cases of neurasthenia and pseudo-neurasthenia, that the "stomach is the link in the vicious circle which has to be forged anew" ("System of Medicine," Vol. II.), these patients were placed on Gray's Glycerine Tonic Comp., the announced ingredients of which are well-known stomachics and restoratives of gastric functions. The details in brief are as follows:

Case 2. Male, 29 years of age; bookkeeper; of spare build; had been closely confined to business. He had gradually lost flesh and strength for several months past, was particularly conscious of almost complete failure of appetite and suffered considerably from a frontal headache, which was subject to exacerbations of a nueralgic character. Eye strain was detected and corrected by a skilled oculist, but the headache persisted. Repeated physical examinations failed to reveal any organic disease except marked functional digestive disorders. Anorexia, distress after eating, indisposition to mental and physical exertion, epigastric tenderness and constipation were all present. The patient was first ordered comparative rest, a gradual diet and was placed on two-drachm doses, t. i. d., of elixir of iron, quinine and strychnine. He failed, however, to improve under this treatment and was placed on Gray's Glycerine Tonic Compound, tablespoonful in water, one hour before each meal time. He was ordered in addition an aperient draught at night. Within ten days his improvement was apparent to all his associates. With a marked increase in appetite there was a corresponding ability to digest food and the patient experienced a feeling of general improvement. At the end of one month's treatment he was discharged practically free from all subjective symptoms.

Case 3. Female; 24 years of age; housewife, with exacting duties; had gradually lost flesh, strength and ability to take and digest food. She was nervous to a marked degree, had characteristic symptoms of atonic dyspepsia, was unable to sleep and presented a typical picture of nervous exhaustion. Oxaluria was present. She was ordered rest, freedom from household duties, light diet and Gray's Gylcerine Comp., half-ounce three times daily before meals.

The first change noted was an improvement in appetite and the ability to sleep. A modified "rest cure," with Gray's Gylcerine Tonic Compound, was

continued seven weeks, at the end of which time all the symptoms of atonicity of the digestive functions had disappeared, her appetite was better than it had ever been, she was able to assimilate food, rested well at night, and was able to resume the care of her house.

Case 4. S. F., male, æt. 36. Family history: Mother and one brother died of pulmonary tuberculosis. Personal history good. Had not been sick in sixteen years; then had an attack of maliaria. Present illness November 27, 1900. Severe chill, pulse 106; temperature 102, respiration 36. Great prostration and dry cough. For four days temperature 102 to 103, then gradually declined until on tenth day it was 100. Pulse ranged from 106-120, and then fell to 96. Other symptoms, as cough, expectoration, etc., characteristic of croupous pneumonia. But one point of importance is that there remained, after five weeks, a dullness in the apex of left lung, which would not clear up. Examination of sputum showed the puenmococcus in decreasing numbers after two weeks, and in the fifth week were found tubercle bacilli. Patient had taken cod liver oil in conjunction with the usual remedies in the treatment of pneumonia; but he did not gain in strength. Gray's Glycerine Tonic was then administered. There was an immediate improvement in appetite, the patient began to eat and digest food in adequate quantities, coughed less, increased in flesh, strength and general nutrition. Dullness in left apex is practically gone, and sputum examinations show freedom from tubercle bacilli.

This case is doubly interesting. It illustrates not only the efficacy of the treatment practiced, but shows most forcibly that proper treatment in the early stages of pulmonary tuberculosis will frequently eradicate the disease; this latter fact is emphasized by all medical authorities.

Case 5. Baby, seven months; bottle-fed. Diagnosis: Bronchitis and malnutrition. Treatment: One-half teaspoonful Gray's Glycerine Tonic Compound, clear, every hour. Saw two weeks later. Results: Bronchitis cured. Gain in weight 4½ pounds. General condition improved. Treatment continued for four weeks resulted in overcoming existing malnutrition.

For purposes of brevity further detailed cases—which are many and varied—are not herewith reported. The above mentioned cases suffice to illustrate the statement made that if the treatment of the various forms of anaemia, nervous exhaustion and malnutrition—existing either independently or as a part of constitutional or organic disease—are to be satisfactorily treated and prompt results expected, the old time so-called tonics, of which iron, arsenic, strychnine, cod liver oil, etc., are representatives, must be supplanted by measures which are not only rational and scientific, but which have the approval of extensive and critical clinical experience. Gray's Tonic is an example of this principle; it is a reliable tonic, reconstructive and nutrient in the truest and fullest sense of these terms. The remedy in question was obtained from the Purdue Frederick Co., 15 Murray street, New York.

Quick and Sure and Tried.

No doubt many of our doctor friends will recognize in the following, from Chas. B. Forsyth, M. D., (Bellevue Hospital Medical College, New York City), dated Alexandria Bay, N. Y., Jan. 6, 1903, an expression which will, in many instances, recall their own experience. He says:

"I can say no more than I have used

Antikamnia Tablets since I began practicing medicine. Several times I have switched to other preparations, but I invariably come back to Antikamnia Tablets, when I want quick and sure results.'"

The Antikamnia Chemical Company, St. Louis, Mo., is an old and responsible concern, and any of their medicinal specialties may be depended upon to be just as represented. The latest additions to their list of preparations are "Antikamnia and Heroin Tablets," and "Laxative Antikamnia and Quinine Tablets." Send to them for samples, mentioning CAROLINA MEDICAL JOURNAL.

A Valuable Auxiliary in the Treatment of Pneumonia.

Pneumonia is nowadays considered a general infectious disease, due to a special germ, and not, as was formerly believed, a local condition resulting from exposure to cold. It is, therefore, of the utmost importance that once it appears in the household, every precaution should be taken to prevent its spread to other members of the family. As the germ is carried through the air, this cannot be accomplished by fluid disinfectants; an unirritating and non-poisonous antiseptic which is sufficiently powerful to destroy the infection and yet can be freely breathed by the patient is required. There is only one safe and efficient agent of this kind, and that is Vapo-Cresolene. Experiments by a member of the pathological department of Yale University have demonstrated its high germicidal power. Its vapor permeates the air of the sick room, destroys the infection at its source, and when inhaled by the patient, allays cough and irritation in the air-passages, promotes expectoration, and thus aids materially in bringing about recovery.

Sanmetto in Urethritis and Enuresis.

Having had elegant results from the use of Sanmetto in genito-urinary diseases for quite a time, I am more fully convinced of its curative properties since having had boy, aged 12, call at my office, who had been suffering from an obstinate case of urethritis with enuresis. He stated that he had consulted two or three doctors, with no relief, and if he could be cured, cure him, and if not, not to give him anything. So I put him on the following:

℞ Oil Santali.....ʒii
Sanmetto q. s.....ʒiv
Sig.....ʒi

Every four hours, with rest in bed, and proper diet, and in ten days he was well and had no symptoms of either of the above troubles. Henceforth I shall know where to get a specific for such cases. I have always had good results from Sanmetto.

WYATT C. HATCHER, M. D.,
Brunswick, Ga.

Febrisol in Typhoid Fever.

I have been in active practice thirty-two years and have lost only two cases of typhoid fever. I have a very serious case now, in which I have used a half-pound bottle of Febrisol (Tilden's) and must say it is the best preparation I have ever tried. With it you can control the temperature to a certainty and no depression follows.

W. S. CLINE, M. D.,
Woodstock, Va.

(Copied from the St. Louis *Courier of Medicine,* issue of January, 1903.)

Notwithstanding the large number of Hypophosphites on the market, it is quite difficult to obtain a uniform and reliable syrup. "Robinson's" is a highly elegant preparation, and possesses an

Dependable Doses

for Children.

Superior in effects to tablets.

The medicament is carefully triturated with sugar of milk and rolled into minute pills and designated

PARVULES

We note a few of the popular kinds:

Aloin, 1-10 gr.	Calomel, 1-10 gr. 1-20 gr. 1-8 gr. 1-6 gr.
Calomel and Ipecac, aa 1-10 gr.	Capsicum, ...1-20 gr.
Dover's Powder,.....1-3 gr.	Morphin. Sul.....1-50 gr.
Nux Vomica, ...1-50 gr.	Podophyllin,.....1-40 gr.
Santonine,.....1-10 gr.	

and a list of others quite as valuable.

PARVULES are just as effective for adults; the plan of administration is a small dose, frequently repeated.

Samples and literature on request.

WILLIAM R. WARNER & CO.

Makers of

Standard Products for Physicians Prescribing,

PHILADELPHIA NEW YORK CHICAGO NEW ORLEANS

advantage over some others, in that it holds the various salts, including iron, quinine, and strychnine, etc., in perfect solution, and is not liable to the formation of fungous growths.

The following is an extract from an article entitled "The Heart in Typhoid and Malarial Fevers," by Dr. S. Aug. Freund, Berlin, Germany, in the November number of *Medical Brief*:-

"Have I a case of fever? Then I do not lose sight of the enteric disorder; and yet with my thoughts upon that, I still remember that there is a heart that is liable, at any hour, to complicate matters. That heart calls for the bromidia. It prevents the irritation, the poisoning. It cures the irritation, the poisoning. I can not dispense with it. How did I learn this? Partly (as I have outlined) by experiment, and partly by surgical experience. What do I mean by surgical experience? This: It is after the shock, after the operation may be, after the fever invades. What is that which we say? 'All will go well, unless heart failure should ensue.' We all know that expression. It is heard every day. But since I began to employ bromidia for the pain, this has been eliminated. I never dread 'heart failure' when I administer bromidia in my surgical cases. This is tantamount to saying that I never dread and never fear it, as in all surgical cases, without an exception, I give bromidia. Having had such results there, there should be no need to ask where the principal lesson was learned in this mater of the fevers. I would not treat a surgical case and omit bromidia. I would not treat typhoid or typho-malarial fever, and omit bromidia."

I find Aletris Cordial to be an excellent and palatable preparation. I have used it in cases of dysmenorrhea, irritable ovary, uterine congestion, leucorrhea and endometritis, with the best of results. In a case of irritable ovary, that had resisted all treatment for four years, I prescribed Alteris Cordial, and after taking for four days, the pain was entirely relieved.—*T. R. Dice, M. D., Utica, Mo.*

THERAPEUTIC HINTS.

To Prevent Nasal and Throat Complications in Scarlatina.

J. A. Le Sage (*Union medicale du Canada*, January) recommends intermittent use of boric or mentholated ointments:

℞ Menthol.....0.20 grammes (3 gr.)
Boric acid .....4.00 grammes (60 gr.)
Petrolatum.....30.00 grammes (1 oz.)
M. ft. ungt.

Or this:

℞ Resorcin .....0.30 grammes (4½ gr.)
Petrolatum.....30.00 grammes (1 oz.)
M. ft. ungt.

Injections of the following oil are also recommended:

℞ Essential oil of mint .....11 drops
Resorcin.....1 gramme (15 gr.)
Sterilized olive oil ..20 grammes (5 dr)
M. Ten drops to be injected into each nostril, night and morning.

These measures will obviate the purulent rhinitis, the result of which is uncertain and rarely remains localized to the nasal mucous membrane.

The throat demands equal care. Antisepsis may be obtained by gargles of

Are You Interested

in learning of the remarkable results now being obtained by thousands of physicians in the treatment of consumption, scrofula, and wasting diseases generally through the agency of **Hydroleine?**

Cod-liver oil is invaluable as a food for fat-starved tissues, provided it is thoroughly assimilated. In the form of Hydroleine (hydrated oil) its perfect assimilation is insured.

The oil contained in two teaspoonfuls of Hydroleine is ten times more serviceable than an equal quantity of pure cod-liver oil, because every particle of the former is assimilable; whereas nine-tenths of the pure oil is wasted because unabsorbed.

Hydroleine is readily retained by the weakest stomach and is a remarkable producer of weight and strength.

Sold by druggists generally.

THE CHARLES N. CRITTENTON CO.

115-117 FULTON STREET, NEW YORK.

Samples free to physicians. Sole Agents for the United States

borated, naphtholated, or saline water. If the tonsils are affected they may be touched with resorcin, or with a weak (2 per cent.) solution of silver nitrate. —*N. Y. Med. Jour.*

Croup.

L. Lozansky, in *Merck's Archives,* recommends the use of creosotal in croup, measles, and whooping cough. He usually begins with large doses and continues with reduced doses after apyrexia sets in, in order to prevent relapse. The following formula is employed by him:

℞	Infusi ipecac..... ℥ iss-℥ iii	45–90	65
	Sol. ammon. anis. m. xv-xxiv	1–1	
	Creosotal.....m. xlv-lxx	3–5	
	Syr. senegae ..... ʒ iv	15	

M. Sig.: One teaspoonful every half hour for four doses, then every hour, and finally every three hours. When the temperature ranges high the following combination is recommended:

℞	Sodii salicylatis... ...gr. xv-xxx	1–2	90
	Creosotal .....m. xlv-lxx	3–5	
	Emuls. amygd ..... ℥ iii	90	
	Syr. ipecac ..... ʒ iv	15	

M. Sig.: One teaspoonful every half hour for four doses, then every hour, gradually increasing the interval.

Clinical Use of the Iodids.

Wild, in an abstract in the *Internat. Med. Mag.,* states that both clinically and experimentally the sodium salt has proved less toxic than the potassium. He states that the two chief objections to the potassium salt are the liability to cause idoism and the marked depression it produces.

The sodium salt should be substituted when symptoms of iodism make their appearance, otherwise the potassium should be stopped. He regards the depressing effect of the potassium to be overdrawn as ordinary food contains a considerable amount of the potash, especially the vegetable diet. To counterbalance the amount of potassium, the vegetable portion of the patient's diet can be cut down, and milk, eggs, fish and meat added.—*Jour. A. M. A.*

Treatment of Acute Bronchitis.

The *Revue francaise de medicine et de chirurgie* for January 19th recommends the administration during the first stage, characterized by dryness and cough, of opium, with, if fever is present, antipyrine or pyramidon.

During the second stage, characterized by severe cough and the easy expectoration of mucopurulent sputa, balsamics should be given, e. g.:

℞	Terpin hydrate...0.15 gramme (2¼ gr.)	
	Sodium benzoate...0.20 gramme (3 gr.)	

M. For one powder. Send xii. Three powders daily. Frictions of the chest with turpentine should also be used.—*N. Y. Med. Jour.*

Nocturnal Incontinence of Urine.

The following, according to an abstract in the *N. Y. Med. Jour.,* is recommended in the treatment of nocturnal enuresis:

℞	Syr belladonnae ..... ℥ i	30	45
	Antipyrini ..... ʒ iiiss	14	
	Syr. tolutani..... ..... ℥ iss	45	

M. Sig.: One teaspoonful morning and evening. Increase the dose to two teaspoonfuls if the incontinence persists.—[An unsafe dose of antipyrine. —Ed.]

The foregoing, according to the author, is Trosseau's formula, to which is added antipyrin. The following, containing camphor and ammonium valerianate, is also recommended:

℞	Ext. belladonnae.....gr. 1-6	01	09
	Camph. bromidi.....gr. iss	09	
	Ammon. valerianatis .....gr. ¼	05	

M. Ft. pil. No. i. Sig.: One such to be taken at bedtime; or:

℞ Ext. rhois arom....gr. xxxviiss 2 | 50
Ammon. valer.....gr. x | 65
Syr. menthae..... ℥v 150 |

M. Sig.: Two teaspoonfuls morning and evening.

The Dual Alliance.

Russia did not form her alliance with France because she feared a land war, says the *Novoye Vremya,* St. Petersburg. Russia would certainly emerge victorious from any war on land. What she aimed at was the protection of the powerful French navy. But recent French utterances indicate a modification of French naval policy. If there be any such modification, says the St. Petersburg paper, then Russia must revise her ideas of the utility of the existing dual alliance.

Japan for the Japanese.

Foreign capitalists are given too many facilities for investment in Japan, intimates the *Mainichi* (Osaka). Japan's men of means must step in and thus keep large sums from being sent out of the country every year.

The Right to Quarantine Smallpox.—On January 7, a temporary injunction was granted by the Outagamie County, New York, Circuit Court restraining the board of health of Appleton from removing to the pesthouse Mrs. Elizabeth Leonhardt, alleged to have smallpox. The complaint in the case, made by the woman and her husband, alleges that the board of health is not legally organized under the statutes of the State, and has no authority to quarantine or to confine in a pesthouse. There are now more than twenty cases in the pesthouse, and if that is closed by permanent injunction, it is threatened that a shotgun quarantine may be instituted.

PNEUMONIA

It is an important point in the treatment of pneumonia to reduce the dyspnea and irritating cough.

This may be done without internal medication and without disturbing the patient, by the use of Vaporized Cresolene.

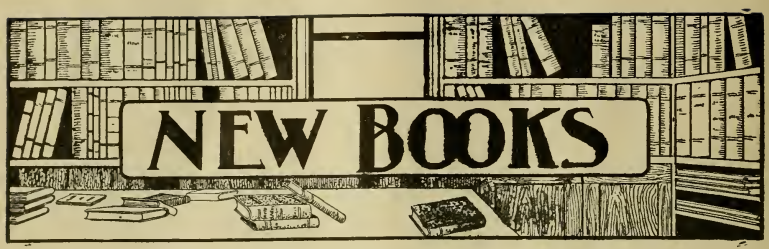
Vaporized Cresolene has a marked sedative influence on all diseases of the respiratory organs attended with irritation and a spasmodic element.

Literature on application.

THE VAPO-CRESOLENE CO.
180 FULTON ST., NEW YORK.

Keeley Cure
For Drunkenness and Drug Using.
Please write us. Correspondence confidential.
Our Illustrated Handbook Sent Free On Request.
THE KEELEY INSTITUTE, Dept. B, Greensboro, N.C.

NEURILLA
NERVE CALMATIVE
NERVE HEALTH follows its use.
Dose: Teaspoonful every half hour until nervousness is abated, then four times a day. Teething Children 10 to 20 drops.
DAD CHEMICAL COMPANY, NEW YORK.



A Text-Book of Gynecology. Edited by Charles A. L. Reed, A. M., M. D. D. Appleton & Company.

The advent of this book is like the coming of a familiar friend, since the editor and authors are well known to the profession and deservedly occupy a prominent place in their respective specialties.

Dr. Reed has consummated a great scheme by grouping together the production of his associate authors written especially for this book, with that of his own, and systematizing them into a harmonious whole. One means employed was to use the third person throughout the entire work, even when referring to his own writings.

The writer confesses to have sat down to a review of this work a little bit prejudiced, as the effort to bring together the writings of many others into a system ordinarily results only in emphasizing the incongruities of the various writers. But before the book was half read it became apparent that the alchemy of the editor's genius had practically dissolved that objection, and that he had well sustained his declared purpose to maintain the synthetic relation of the various departments of the medical sciences in so far as they relate to gynecology.

The primary object of the work as declared in the preface, is "the formulation of a text-book which shall serve as a working manual for practitioner and student, and which shall embrace the best improved developments of gynecology." That this has been done, and well done, no one who reads the book can doubt.

The work consists of a single volume, of convenient size, containing 900 pages, and is published by Appleton, which is sufficient guarantee that the mechanical part of the work is first-class in every particular. The type is large and clear, the subject matter well arranged, and the cuts, while many are not new, are most excellent and always appropriate.

The scope of the work is comprehensive, embracing as it does every phase of gynecology from bacteriology to the evidences of rape. Indeed the writer knows of no work on the subject that is more complete in all its teachings. A student with a clear knowledge of the contents of this book could easily pass an examination on gynecology before any examining board, while a pactitioner with the same knowledge would scarcely fail to know what to do in the presence of even the gravest gynecological emergency.

So much for the book in a general way. Now as to a few details. On page 10, it is stated "that the relative large cranial development of children borne by civilized woman rather than

EVERYBODY'S MAGAZINE

will be more fully than ever in 1903 the distinctively bright, virile and wholesome periodical of America. It will be always vitally interesting. It will take hold on human experience with a firm grip. It will show that a magazine may be thrilling without being sensational. *Everybody's* presents strenuous and clean life in every phase, through fact and fiction. It is now, and will be increasingly,

A MAGAZINE OF LIFE.

A mere hint of part of the year's programme is given below:

TRUE STORIES OF IMPORTANT EVENTS. There is always an "inside" to a notable occurrence; and it is almost invariably a story of intense human interest.

The True Story of the Organization of the Steel Trust.

The True Story of How Theodore Roosevelt Became President.

The True Story of the First Railroad Merger.

SIGNIFICANT AUTOBIOGRAPHIES:

The Autobiography of an Insurance Agent, who must know human nature intimately.

The Autobiography of a Bank Cashier, who uses keen insight into the ways of borrowers.

The Autobiography of a Naval Officer, who regards civil life as a lower order of existence.

The Autobiography of a Member of Congress, who reveals many things that are seldom told.

THE BLOWING OF AN OIL BUBBLE. By S. MacREYNOLDS Exposing the methods of promotion "sharks." who victimize the public with stock in visionary oil wells.

STORIES OF STRENUOUS LIVES. The true stories of men whose personal feats outdo the exploits of heroes of romance.

THE BOHEMIAN MUSICIAN By JAN KUBELIK. The brilliant young violin virtuoso tells the story of his own career.

WORK WITH THE HANDS. By BOOKER T. WASHINGTON, of Tuskegee Institute. This is the most important message of the author to his generation.

STORIES OF WESTERN RIVER LIFE. Mr. G. W. Ogden's stories of life and adventure in the great river steamers which half a century ago plied the Mississippi, the Missouri and the Ohio make a picture of an intensely interesting phase of our national development.

NATURE STUDIES. By Prof. J. M. COULTER, of the University of Chicago; A. R. DUGMORE, H. C. MERWIN and others. Being intimate observations of nature from the scientific, pictorial and nature-loving point of view.

POPE LEO XIII. By F. MARION CRAWFORD, the well-known novelist who is the official biographer of the Pope, and has unusual opportunities for acquiring a knowledge of his career.

NEW YORK THE MOST INTERESTING PLACE IN THE WORLD A series of illustrated articles explaining the great forces at work which destine New York to be the coming capital of the world.

DRAMATIC EVENTS IN AMERICAN HISTORY. Many of the hill-top events of the greatest emotional and historic interest vividly told by some of the best writers of the day, and profusely illustrated.

The Webster-Hayne Debate.

Critical Days in Great Careers.

The Fall of Richmond.

WOMEN'S SPORTS. [By Miss ANNA WHELAN BETTS.

FICTION. *Everybody's Magazine* has secured for the coming year stories by some of the brightest, most original writers of the present day, prominent among whom are the following: MARY E. WILKINS, HOLMAN F. DAY, JUSTUS MILES FORMAN, WILLIAM BULFIN, SYDNEY PORTER, W. R. LIGHTON, and many other old favorites, as well as many new writers who are rapidly forging to the front in the field of literature. Among the stories that will appear during the year are: "The Way of the Wind," by the author of "A Modern Antæus;" "Vashti," by G. M. Baxter; "An Unconvicted Convict," by E. C. McCants; "The Rapier of Ferarra, by Atherton Brownell; "The Place of Dragons," by Ella W. Peatie The Captain," by Maxamilian Foster; "The Wheel of the Potter," by Herman Whitaker; and "The Needle of the Damned," by Justus Miles Forman.

ONE DOLLAR PER YEAR. TEN CENTS A NUMBER.

JOHN WANAMAKER, Publisher.

See Club Offers on Next Page.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

any other one circumstance, tends to increase the difficulties and dangers of partuition." It is consoling to know that these dangers are not due principally, at least, to the degenerative influences of civilization, as is generally thought.

Under the head of therapeutics, we find that "the most valuable general remedy in the treatment of the diseases of women is *rest.*" The writer is fully convinced of the truth of this statement.

The location of abdominal diseases is much simplified by dividing the abdomen into four quadrants, instead of into nine regions, as formerly.

The great value of blood examination is pointed out.

There is no more valuable chapter in the book than the one on sepsis, in which is depicted with great clearness the relation of bacteria to the infectious diseases.

The use of pure carbolic acid to wash the hands in after handling septic cases, is advised, neutralizing the acid, of course with alcohol. The writer has tried this method, and while the acid probably kills the germs, it leaves the hands very harsh and dry.

The importance of pressure when using steam for sterilizing, is pointed out, and the sterilizer shown in Fig. 22 strikes one as being ideal.

In the prophylaxis and treatment of shock, the advantages of hypodermoclysis are distinctly set forth. The writer should, however, take exception to the advice to use nitro-glycerine in shock, since this drug lowers arterial tension, which is the thing we wish to overcome.

The remarks on page 89 concerning the deliterious influences of cold on patients while undergoing an operation are very timely. This is one of the weak points in our surgical methods, and we only wish the authors had told us how to overcome this difficulty.

It is gratifying to see the emphasis that is put upon the relative greater safety of ether as compared with chloroform, other things being equal. The favor with which spinal anaesthesia is mentioned hardly accords with the views of the majority of surgeons.

The evils of hypocatharsis are spoken of in no uncertain terms.

The many other good features of the work will have to be passed by, because of the limits of this review, but there is one thing that the writer feels that he can not pass over in silence, and that is the endorsement the book gives to *legalizing prostitution.* It is indeed painful to see a book of this character lend its great prestige to approval of so villainous a practice, since prostitution is one of the most serious crimes of all ages. If there is any truth in the Bible fornication and adultery is one of the great crimes, classed with idolatry and murder, and the changes are rung on this sin from Genesis to Revelation. The edict issuing from Mt. Sinai's thunder rocked top that "Thou shalt not commit adultery," is as binding today as when first transmitted to the chosen people. This is the most flagrant error in the book. The writer knows personally many of the authors of Reed's Gynecology and is loath to believe that they endorse the utterances it contains touching prostitution.

With even this glaring inconsistency, the work easily stands first for the purposes intended by its distinguished editor; and if the writer were teaching gynecology today he would adopt the work as a text-book till a better one appeared.

J. W. Long, M. D.,
Emeritus Professor Gynecology and Pediatrics in the Medical College of Virginia.

OUR CLUBBING OFFERS.

By special arrangements we are enabled to offer you a number of splendid combinations of yearly subscriptions. The subscriptions may be new or renewal (unless otherwise specified), and may be ordered sent to one or to different addresses.

Publications from Which You May Select.

Class A.	Regular Price.
Woman's Home Companion	$1 00
Cosmopolitan	1.00
Arena	2.50
Good Housekeeping	1.00
American Boy	1 00
Mind	2 00
Pilgrim	1.00
What to Eat	1.00
Table Talk	1.00
Recreation	1.00

Class C.	Regular Price.
Little Folks—new	$1.00
Ladies' World	.40
Motherhood	1.00
Criterion	1.00
The Camera	1.00
American Messenger	.50
Book News	.50

We Offer the Following Clubbing Rates for 1903.

The Carolina Medical Journal, Everybody's Magazine, and any one periodical in Class C $2.00

The Carolina Medical Journal, Everybody's Magazine, and any two periodicals in Class C 2.25

The Carolina Medical Journal, Everybody's Magazine, and any one periodical in Class A 2.25

The Carolina Medical Journal, Everybody's Magazine, and any two periodicals in Class A 2.75

The Carolina Medical Journal, Everybody's Magazine, and any one of Class A and any one of Class C 2.50

A Special Offer—$7.50 for $3.50.

For only $3.50 we can accept your order for a club consisting of the Carolina Medical Journal, Everybody's Magazine, Public Opinion (new), and any *one* of Class A or Class C.

Take Note.—The regular price of Public Opinion alone is $3.00, and it is a splendid weekly magazine which will be appreciated by every American family. Note the bargain we are enabled to offer:

Public Opinion—new sub	$3.00
Arena (Woman's Home Companion)	2.50
Everybody's Magazine	1.00
The Carolina Medical Journal	1.00

$7.50 WORTH. SEND $3.50 AND YOU GET ALL FOR ONE YEAR.

THE CAROLINA MEDICAL JOURNAL,

Charlotte, North Carolina.

When writing Advertisers please mention this Journal.

The fourth volume of the Lippencotts International Clinics surpasses any which have been previously issued, and this is saying much, for this publication has been of the highest excellence from the beginning. During the past year these volumes have comprised 1,200 pages with 12 colored plates, 218 text illustrations, illuminating articles 98, embracing 28 in department of medicine, 27 in therapeutics, 22 in surgery, 4 in obstetrics and gynecology, 5 on eye, ear, nose and threat, and 3 monographs on prognosis of medicine, the blood and the functions of the digestive glands. Under the department of Therapeutics the articles on "The Sanatory Tent and its Use in the Treatment of Pulmonary Tuberculosis;" the "Treatment of Chronic Gastric Catarrhs and Some Practical Points on the Early Diagnosis of and Treatment of Malignant Diseases of the Larynx," are to be especially commended to both the general practitioner and specialist. Under medicine we find two valuable articles. First. differential diagnosis between tuberculosis of lungs and diseases which resemble it; second, Abdominal Diagnosis. The various articles under Neurology, Surgery, Dermathology, Opthalmology, are replete with practical matter from the leading authorities of the world. Biographical sketches of eminent living physicians is a very pleasing feature and the subjects of this quarter are Drs. Horatio C. Wood and William W. Keen. The monograph on "The Blood in Health and Disease, with a Review of the Recent Important Work on the Subject," is the best presentation it has been our pleasure to read in recent medical literature.

REVIEW OF MEDICAL AND SURGICAL PROGRESS.

Intestinal Indigestion and Its Relation to Arterial Sclerosis and Renal Disease.

Dr. Weber reported a long series of observations on three cases of chronic intestinal indigestion which finally developed chronic intestitial nephritis and in which the nephritis was the cause of death. He had attended on these cases for 25 or 30 years, and could exclude all other etiological factors. Physicians of late years have been calling attention to the fact that cholera infantum and acute and sub-acute intestinal catarrhs are rather frequently complicated by acute nephritis and often produced death. He reasoned that if toxines absorbed from the alimentary canal in these cases can produce acute nephritis, that these same factors supplied more slowly in sub-acute and chronic interstitial catarrhs could produce slow interstitial inflammation in the kidney. Seibert, of New York, had spoken of these acute cases of intestinal infection followed by acute nephritis to the academy several years ago, and Elliott, of Chicago, had suggested that similar role was played by gastro-intestinal toxines in producing chronic interstitial nephritis at last meeting of the American Association. Elliott stated that the kidneys failed to excrete properly because of the toxic substance which was in the blood, and the liver then failed to handle properly the material brought to it and added its portion of toxic products, and thus a vicious circle was es-

tablished which continually depressed the patient's nutrition. Dr. Elliott's suggestion has been favorably received at home and abroad, and the profession, by keeping this toxic etiology in mind, may be in future enabled by treating the intestinal condition properly in its earlier stages to prevent the real complication, or even in cases where some damage has been already done to kidney to stop the process by relieving the intestinal derangement. Dr. Weber, in the *post-graduate* in 1898, endeavored to establish the fact that intestinal inflammatory trouble was brought about in the kidney through the toxines interfering with metabolism while passing along the lymph spaces of the vertical substance of the kidney, and stated that some of these cases had been benefited by iodide of potassium (4 to 5 gr. 3 times daily) which aided elimination and stimulated the functional activity of the parts. To prevent these renal lesions, we must try to bring about intestinal antisepsis by more or less frequent doses of calomel, irrigation of colon, correct diet and look after the patient's personal hygiene, enjoining exersises, baths, etc. To these systemic toxines we may also look to explain origin of gout, uric acid, diasthesis, diabetes and avoid the acute complications attending diabetic coma, uraemia and eclampsia.—*Reported in Medical Record from proceedings N. Y. Academy of Medicine.*

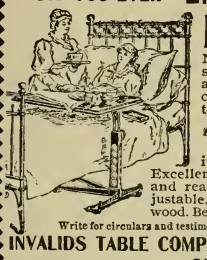
DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

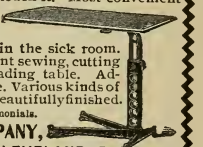
¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

DID YOU EVER ENJOY A MEAL IN BED?



Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.



Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
CLEVELAND, O.

Differential Diagnosis Between Tuberculosis of the Lungs and the Diseases Which Resemble It.

Tuberculosis of the lungs is to be distinguished from right sided heart disease with its pulmonary complication, chronic bronchitis. Uncomplicated right sided heart disease and uncomplicated tuberculosis are easily recognized, but right heart disease with chronic bronchitis is often difficult to differentiate from pulmonary tuberculosis, with organic heart disease. In many cases the tuberculin test is not applicable on account of the heart trouble. In right heart disease is found lung engorgement with more or less oedema, and if of long duration, may have hypertrophy of bronchial lymphates with bronchoroea and thickening of bronchial mucosa. There is frequent catching of cold and often chronic cold; streptococcic infection of mucosa gives elevation of temperature; dilated heart gives increased pulse-rate; there is persistent cough, expectoration profuse; impaired nutrition; sweats; anaemia, prolongation of expiration and at times impairment of

LIQUID FEBRISOL

(TILDEN)

DOCTOR: Read this formula, then send for sample and literature. After a trial you will be convinced that Febrisol is the best anti-pain and febrifuge ever offered the medical profession. It is as reliable as morphine; has none of the bad after effects, and is opposed to cardiac depression.

Formula: Each fluid drachm contains chemically pure

Phenacetine	1 gr.
Salol	½ gr.
Cit. Caffeine	½ gr.
Acetanilid	1¼ gr.
Tartaric Acid	¼ gr.
Soda Bicarb.	1½ gr.

Prepared expressly for Physicians' Prescriptions.

THE TILDEN COMPANY,

PHARMACEUTICAL CHEMISTS,

New Lebanon, N. Y. **St. Louis, Mo.**

resonance, thus presenting nearly exactly sign of pulmonary tuberculosis. There is this difference in the symptom-complex of the two: In right-heart disease, with bronchitis prolongation of expiration, is found evenly distributed and of same degree in both lungs and likewise impairment of resonance is evenly distributed and dullness is not complete. Resonance is good above clavicles, but impaired along both sides vertebrae and spreads out tree-like with the bronchi into roots of lungs, due to enlargement glands and thickening of mucosa. If there be only œdema and no bronchial thickening or enlarged glands, we find subscrepetant rale in one or both bases, with fair respiration in apicis, no prolongation expiratory murmur, and resonance is good in upper lobes and somewhat impaired in bases.

The role in these cases is distinctive in that it "conveys impression that there is something sticking in bronchioles, preventing air-cells from opening freely." In contrast with these signs in tuberculosis, lesion is localized, circumscribed and clearly definable and in early stage even complicated with bronchitis, can localize infiltration by impairment of resonance, which is distinct from any impairment from transient causes. If one apex is infiltrated, there is prolongation of expiratory murmur, impairment resonance over upper scapula, between scapula and vertabrae in back and above clavicle in front, with normal condition over other apex, unless complicated with cold when respiratory sound is lengthened, but resonance is normal. In advanced cases we can outline disease by percussion sounds and sharp dullness over diseased areas and clear resonance over unaffected spaces, yet when in some of these we can settle matter by appeal to microscope and if we fail to find bacilli after repeated examinations, and yet physical signs are clear-cut, we still diagnose

tuberculosis; if, however, we find clinical symptoms of tuberculosis with free expectoration, but resonance over all parts of lung, with red granular pharynx, which is sign of chronic inflammation of mucous membrance, a right sided hearts disease, no bacilli, we exclude tuberculosis, no matter how typical the sputum. In all instances be not hasty, do not rely on a few examinations of sputum as benign tuberculosis may complicate, may occur with right heart disease or right heart disease may give stasis in apicis and simulate tuberculosis.

Empyema when pus has emptied into bronchi, give a long-standing cough, sweats, profuse sputum, fast pulse, elevation temperature, dullness at base of lung, prolongation expiration and abnormal resonance on diseased side; by way of distinction, however, we find supra-clavicular and suprascapular resonance and absence of bacilli.

Bases when infiltrated by tuberculosis always show bacilli with sputum and will rapidly extend to apex. Hypertrophy of liver is mistaken by some for tuberculosis in some cases, generally through carelessness in examination. Here liver is enlarged, lying against diaphragm, there is chronic bronchitis from alcoholism, morning cough and expectoration, but we will find resonance over entire pulmonary tissue, which offsets prolonged respiration from bronchitis; these subjects show normal or excessive amount of flesh, normal pulse and temperature, are hypochondriacal and dissatisfied unless you diagnose tuberculosis.

Cancer of lungs is rare, but resembles tuberculosis closely in being circumscribed and sharply marked from sound lung tissue, runs a rapid course, involving large amount of tissue in short time, severe cough, sputum thin

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:
8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

and not abundant, lymph glands enlarged; no bacilli nor tuberculin reaction.—*Lawrence W. Flick in International Clinics.*

MEDICAL NEWS AND ITEMS.

Medical Inspectors Dismissed—Seven medical school inspectors of the New York City Board of Health have recently been dismissed for falsifying vaccination reports.

London treats "kleptomaniacs" of gentle birth by giving them the choice between prosecution and birching. In one shop twenty have accepted the whipping—all women.

A Michigan lawyer died of heart disease, presumably angina pectoris, in a railway car. Now what sort of a doctor had he, that he was not provided with glonoin for such emergencies?

Leffmann has been investigating a cure for drunkenness, put up in powders, twelve for a dollar. All he could detect in it was ammonium chloride and milk sugar.—*Phila. Med. Jour.*

Smallpox in Pennsylvania.—It is reported by the secretary of the Pennsylvania State Board of Health that there were reported from that State during the month of January 940 cases of smallpox with fifty-five deaths.

Beri-beri is reported as prevailing in Louisiana, the southwest part. The treatment is by change of locality, nutritious diet, milk, calomel and soda, cholagogus, heart and hematic tonics. Quinine is useless.—*Young, J. A. M. A.*

Surgeon-General Presley M. Rixey gave an address in Jefferson Medical College, Philadelphia, February 3, under the auspices of the H. A. Hare Medical Society, on the opportunities of medical men in the navy. A reception and banquet in his honor followed.

Paget has treated 26 cases of sunken nose by paraffin injections, the general results being favorable. No danger of suppuration, sloughing or poisoning; the method is full of little difficulties; three cases of embolism have been reported. He uses paraffin at 115.

Campaign Against Charlatans in Germany.—The last issue of the *Allg. Med. Ct.-Ztg.* mentions four suits against charatans, resulting in the imposition of a fine of $250 each on two, and the condemnation to six months' and eighteen months' imprisonment of two prayer healers.

German Faker Convicted—Herr Nardenkoetter, who has been a notorious advertising faker in Berlin for years, was fined $900 and to be imprisoned three years. He forfeited bail and escaped to England. He had contrived to defy the medical societies and public prosecutors until recently.

South Carolina Medical Society.—The meeting of the Medical Society of the State of South Carolina, will be held in Sumpter on April 15th to 16th. Many valuable papers are promised and the meeting will be of unusual interest. The secretary, to whom title of papers should be sent, is Dr. A. B. Knowlton, Columbia, S. C.

Arrested for Dispensing Drugs Without a License.—Dr. S. A. D. Young, of San Francisco, was arrested on January 29th, on the charge of violating the State pharmacy laws. It is charged that he sold drugs other than prescriptions of his own writing without hold-

WHEN ALL ELSE FAILS

SEND YOUR CHRONICS TO

VADE MECUM SPRINGS

Splendid Hotel and Cottage Entertainment, Hot and Cold Mineral Baths and Modern Sanitary Equipment

Let us ship your patients the water for use at home, in bottles, carboys or barrels. We have in North Carolina a water that has no domestic competitor, and no foreign superior. See analysis below:

Analysis of Vade Mecum Water.

Grains per U. S. Gallon, 231 cubic inches.

	GRAINS			GRAINS
Magnesium Sulphate	7.33524	Sulphuric Acid	(SO3)	56.94360
Calcium Sulphate	25.71113	Sulphurous Acid	(SO2)	.08514
Strontium Sulphate	.73481	Chlorine	(Cl)	7.07743
Potassium Sulphate	1.17191	Iodine	(I)	.00105
Sodium Sulphate	64.04838	Bromine	(Br)	trace.
Sodium Hyposulphate	.11663	Flourine	(Fl)	.04665
Magnesium Carbonate	.50153	Phosphoric Acid	(P2O5)	.00875
Calcium Carbonate	5.08299	Nitric Acid	(NO3)	.41406
Strotium Carbonate	.13413	Carbonic Acid	(CO2)	6.60976
Iron (ferrous) Carbonate	.39715	Lime	(CaO)	13.43569
Lithium Chloride	.01399	Strontia	(SrO)	.51319
Sodium Chloride	11.68057	Magnesia	(MgO)	2.77594
Sodium Bromide traces	——	Iron	(FeO)	.24669
Sodium Iodide	.00122	Potash	(K2O)	.63333
Sodium Arsenate	.00198	Soda	(Na2O)	34.17817
Calcium Fluoride	.0 564	Lithium	(Li)	.00234
Calcium Phosphate	.01168	Alumina	(Al2O3)	.03499
Magnesium Nitrate	.49512	Silica	(SiO2)	.67648
Alumina	.03499			——
Silicic Acid	.67648			123.68326
Carbon dioxide, combined with Mono-Carbonates	2.68321			
	120.92846			

In general terms I would place this water under the purgative water; this class embraces the celebrated water of Pullna, Bohemia, Friedrichshall, Germany, and Carisbad, Bohemia, though your water is considerably milder in its action than either of the above waters and *I think on that account preferable.*

This shows a complete analysis of Vade Mecum Mineral Water made by me.

HENRY FROEHLING,
Analytical and Consulting Chemist
RICHMOND, VA.

For sale by all Dealers and Druggists or

VADE MECUM SPRING CO. - - - Vade Mecum, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain CACTINA, the active proximate principle of CEREUS GRANDIFLORA.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for
INDIGESTION

A palatable preparation of PANAX SCHINSENG in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

ing a license as a pharmacist, though he is registered as a practicing physician.

The plague in Mazantlan continues, several deaths from the disease being recorded daily. The Mersin serum has been used in a number of cases with apparently excellent results. The disease is smoldering still in San Francisco, but some of the local papers are even yet denying the existence of the disease and berating every one who mentions the subject.

Carbolic Injections in Tetanus.—Several cases of tetanus are reported in the newspapers with the treatment by carbolic acid injections. The papers treat it as a new discovery. It has been used for several years. The strengths reported are 4 and 10 per cent. In one case 10 drops were injected every three

hours. It will be remembered that this remedy is also of value in diphtheria.

Vaccination Physicians Dismissed.—The Health Commissioner of the city of New York has dismissed three physicians attached to the Bronx Borough branch of the Board of Health, charging them with having made false reports as to the number of vaccinations performed by them. A health inspector has also been dismissed for accepting a fee while working for the department.

It has been claimed that at the United States Army General Hospital at Fort Bayard, N. M., they cure consumption in any stage. While this statement is liable to cause a considerable degree of misunderstanding, still it may be accepted that their results are exceedingly satisfactory. A large element in this is, undoubtedly, the strict military discipline which is maintained. The patients' lives are absolutely regulated for them and the strictest care and supervision exercised.

The New Scarlet Fever Antitoxin.—The cabled dispatches to the *New York Herald* announcing the discovery of a new antitoxin for scarlet fever, endorsed as they are by interviews from Professors Baginsky and Aronson, of Berlin, are well calculated to command the respectful attention of the medical profession on this side of the Atlantic. So far the remedy has been employed in one case in this city under the care of Dr. Louis Fischer and with quite satisfactory results.—*Med. Record.*

A New Method for Treating Erysipelas.—S. Tregubow (*Deutche Med. Wochenschr.*, 1902, No. 27).—The writer has had good results in the treatment of erysipelas, by subjecting the affected area to a burn of the first degree. He accomplishes this by setting fire to a bit of absorbent cotton soaked in alcohol, and holding the burning mass one centimeter from the skin. This treatment is repeated several times daily for two days, and is said distinctly to shorten the course of the disease.

Trachoma in Germany.—The medical inspectors of the school of Prussia did not find a single school in which less than 5 per cent. of the children were affected with granular lids. In the villages the proportion averaged 20 to 48 per cent. and at one place more than half the children were affected. Raehlmann states that more than half a million persons suffer from trachoma in three provinces alone. The government appropriates every year $87,500 to fight it, but still more energetic measures are demanded by the Berlin medical press.

The Brooklyn Robber Arrested.—As has already been noted in these columns, several physicians have been robbed recently in Brooklyn by a man who called during the physician's absence, and, stating that he was an old patient, said that he would await the return of the doctor. The robber would then make his escape with some portable articles of value prior to the return of the physician. On January 17th, Dr. William Ford, of 244 Clinton street, a member of the Board of Police Surgeons, captured the burglar, having recognized him by the published descriptions.

Wholesale Insurance Frauds.—Insurance circles have been much aroused over the discovery of a plot by which life insurance companies have been systematically swindled for ten years or more. The scheme centers around that portion of the city known as "Little Italy." At present, it is known that about a dozen life insurance companies have been swindled, and that at least 111 frauduluent policies have been issued. Some idea of the extent of the

Elegant Pharmaceutical Specialties.

Attention is called to the Excellence and Valuable Therapeutic Properties of these Preparations.

A

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A Standard Remedy in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation

R Each fluidounce contains:

Hypophosphites	Soda	2 gr.
"	Lime	1½ gr.
"	Iron	1½ gr.
"	Quinine.	¾ gr.
"	Manganese ..	1½ gr.
"	Strychnine ..	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate Sodium		12 grains
"	Potassium	4 "
"	Calcum	4 "
"	Iron	2 "

FREE Monohydrated Phosphoric Acid 16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE.—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

C

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence of a sedentery life, coupled with nervous and mental stal strain.

Reliable Pepsin is one of the best Digestive agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

Dose—Adult, desertspoonful to tablespoonful, after eating. Children, one-half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 Per Cent.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromatic menstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable.

Dose—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50.

N. B.—We also make **25 per cent. strength.**
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

Saloform, in Powder, per ounce	$1 25
Saloform, 5-grain Tablets, per 100	1 25
Saloform Elixir, pints	2 00
Solution Albuminate of Iron, Syrup Albuminate of Iron Comp., pints	1 00
Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

Please specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

Founded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

Electric
Heater
Used by
Dr. Hopkins
in
Treating
Deafness.

THE TERRY HEATER CO.,
Cleveland, Ohio.

swindle may be inferred from the statement that there is proof that one member of the gang has realized $200,000. The system was worked on a percentage basis, and involved physicians, notaries public, undertakers and others. Drs. Francesco Mussi and Albrecht Leowit are under heavy bail charged with being parties to the frauds.

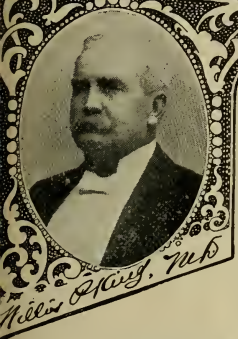
"Mail Curers" Convicted.—Drs. Jas. M. Peebles, Walter T. Bobo and Chas. W. Green, of the People's Institute of Health, Battle Creek, were convicted by a jury in the United States District Court, December 22, 1902, of violating the postal laws. A thirty-day stay of proceedings was granted. It was charged that advertisements of their mental "cure" by mail for all sorts of ills constituted an attempt to obtain money by fraud. During the trial Dr. Bobo testified that he believed Dr. Peebles had a healing power like that of Jesus, only that the doctor's power was smaller. Dr. Bobo admitted that if a patient at a distance managed to procure Dr. Peebles' signed instructions and followed them faithfully the cure would not be effective if the patient had not paid the fee of $1.00.

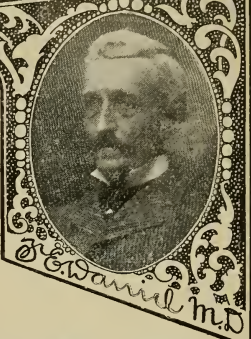
Explosion Wrecks Hospital.—On the night of February 12th, a boiler in the basement of the Medico-Chirurgical Hospital exploded, doing so much damage to the building that it may have to be torn down. Fortunately there was no loss of life or serious personal injury. A panic was prevented by the

SOMETHING FOR LEISURE HOURS

STORIES OF A COUNTRY DOCTOR

RECOLLECTIONS OF A REBEL SURGEON





ALL WORK AND NO PLAY MAKES JACK A DULL BOY

Here are two books chock full of wit, fun and pathos, that should be on every doctor's table. Their titles tell the story. They speak for themselves. Each $1, post-paid

The Clinic Publishing Company, - Ravenswood Station, Chicago.

cool prompt action of the hospital officials. As the building did not take fire, no insurance can be recovered. The hospital will consequently be crippled financially. The board of trustees have made a public appeal for aid in a series of resolutions, closing as follows: "Resolved, that we earnestly appeal to our fellow citizens to aid us in our present predicament. We have no funds to meet the expense of repairs, and yet they must be done at once. We can not close our hospital. Every room and bed is full, and the work must go on."

Presbyterian Eye, Ear and Throat Hospital, Baltimore.—The twenty-fifth anniversary of the founding of this special hospital, one of the largest of its kind in America, took place January 9. The report shows that 11,317 patients were treated during the year, representing 40,204 visits. The patients were divided as follows: Eye departments, 7,137; ear department, 2,007; throat department, 2,103. The question of endowment was discussed, and the secretary announced that offers amounting to $15,000 had been made conditional on the collection of an equal sum. Dr. Francis M. Chisolm was re-elected secretary, and Drs. Hiram Woods and John A. Winslow members of the board. The institution owes its origin to the energy of Dr. Julian J. Chisolm, at present emeritus professor of eye and ear diseases in the University of Maryland, who has retired from practice and resides at Petersburg, Va.

The New York *Medical Critic* announces that each subscriber to that journal will receive a free copy of the *Medical Index* next month (March, 1903). The volume will contain names, place and date of publication, price, circulation and names of editors and publishers of over 600 of the principal med-

ical publications in this country and abroad, and also the titles and authors of each article published during the year 1902, arranged according to subjects and alphabetically. When it is noted that the list is complete up to January, 1903, it should prove especially valuable in bridging over the period which has elapsed since the index medicus was discontinued. Considering the expenditure of time and money in the preparation of this volume, and the liberality of the publishers in presenting it free to the profession, the enterprise marks a new era in medical journalism and merits appreciation and success.

The Samuel D. Gross Prize—Twelve Hundred Dollars.—This prize will be awarded on January 1, 1905. The conditions annexed by the testator are that the prize "shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty pages, octavo, in length illustrative of some subject in surgical pathology or surgical practice, founded upon original investigations, the candidates for the prize to be Americans citizens." It is expressly stipulated that the competitor who receives the prize shall publish his essay in book form, and that he shall deposit one copy of the work in the Samuel D. Gross Library of the Philadelphia Academy of Surgery, and that on the title page it shall be stated that to the essay was awarded the Samuel D. Gross prize of the Philadelphia Academy of Surgery. The essays, which must be written by a single author in the English language, should be sent to the "trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 219 S. 13th St., Philadelphia," on or before January 1, 1905. Each essay must be distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year. The committee reserves the right to make no award if the essays submitted are not considered worthy of the prize. John B. Roberts, M. D., William L. Rodman, M. D., William J. Taylor, M. D., are the trustees.

A Great Earthquake which occurred late last month at Andijan, in Russian Turkestan, destroyed all the government buildings and hundreds of houses. Several thousand natives are reported to have been killed. The city has a population of more than 50,000, and is the most distant Russian post of Turkestan, being more than 1,200 miles east of the Caspian Sea. It lies in the cotton country of Turkestan, and is one of the busiest towns in Central Asia.

Eye Strain of Great Authors.—Dr. George M. Gould, in a forthcoming book entitled "Biographic Clinics," will explain that De Quincey, Carlyle, Huxley and Browning were afflicted with eye strain. He considers that this optical defect was not recognized by their physicians, and believes that if it had been the lives of these great writers might have been materially changed.

The Plague Situation in San Francisco.—Under the influence of the threats of quarantine made at the Conference of Boards of Health held recently at Washington, the Chamber of Commerce and the Board of Trade of the city of San Francisco each appointed committees to co-operate with the officials of the United States Public Health and Marine Hospital Service in securing prompt and vigorous action in the direction of eradicating the bu-

An Elegant Reproduction of a Charming - - - - $15.000 Painting GIVEN AWAY

We have been fortunate in making arrangements with the publishers of the WOMAN'S HOME COMPANION, so that we are able to give our subscribers a chance to accept the biggest offer ever made by any publishing house. The picture that we offer here is by E. Blair Leighton, R A , a most celebrated artist. When exhibited for the first time it was quickly bought up at the enormous price of $15,000, and hung in a famous gallery, where it is admired by thousands and thousands.

REDUCED ILLUSTRATION "GOD SPEED" FULL SIZE 22 BY 28 INCHES

Woman's Home Companion

This magazine is edited and made up in the city of New York, the leading literary and art center of America. It is printed on the finest paper, has 44 to 60 large pages, 11 by 16 inches. It contains the Best Short Stories, Fashions, Children's Pages, Prize Contests Monthly, Nature-Study Club, Embroidery, Physical Culture, Talks With Girls, Nurse Norah's Fairy Tales, the Most Popular Serial Stories, Handy Tool Series for Boys, Sam Loyd's Puzzles, Science and Invention, Social Studies, the Dining-Table, the Kitchen, Twelve Stirring Historical Events Pictured by Celebrated Artists. The twelve numbers will contain more than one thousand beautiful illustrations. Its 400,000 copies every month carry messages of help, profit, pleasure, education, culture and refinement to over two million readers. Its writers and artists are the most famous in America. It is altogether the cleanest, brightest, handsomest, choicest and best of American home magazines published at $1.00 a year.

A Total of Over $700 for only $1.85

"God Speed," very, very cheap at - - - - $5 00
Woman's Home Companion, one year, price - 1 00
Carolina Medical Journal, one year, price - - 1 00
} Both Papers One Year and this Picture sent to any address for only - - -

$1.85

In this offer, although paying less than the ordinary and regular price of the papers for a year, you get in addition the above described charming picture entirely free. The papers and picture in the above offer can go to different addresses. The above offer applies to old and new subscribers. Send all orders to this office.

CAROLINA MEDICAL JOURNAL, CHARLOTTE, N. C.

bonic plague. The governor of the State has given a formal pledge that he will give his active co-operation in such steps as are deemed necessary. A bill has been introduced into the House of Congress by Mr. Slayden, of Texas, appropriating $50,000 to aid in the suppression of the bubonic plague in Mexico and to prevent its spread in the United States. For this purpose the bill authorizes and directs the President of the United States to send a commission of three medical officers of the army and navy to investigate and report the conditions as to this disease there prevalent.

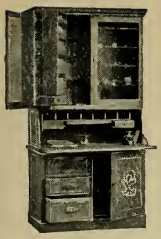
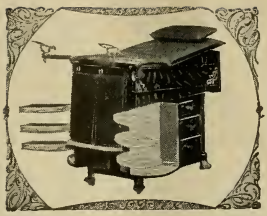
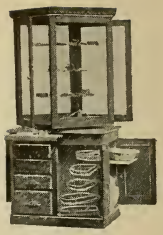
No Relation.—We cannot too strongly impress the fact that Coca, *i. e.*, C O C A, with an *ah* sound to the final a, has no relationship with the family bearing the name Coco with the final little round o. Neither has it any connection or kinship with that other worthy family—Cacao or Cocoa—no matter how the name may be spelled. Coca—with the final *ah* sound, remember—is quite important enough, through the good it can do, to stand for just itself alone.

The Future of Therapeutics.—I believe with Brunton that the prospects of therapeutics are very bright. "I think it is highly probable," says Brunton, "that before long we shall have a series of drugs which will stimulate the biliary secretion of the liver or modify its glycogenic function, arranged in order of their comparative strength, in much the same way we now have the class of antipyretics. We may also fairly expect to obtain a series of remedies which will act on the spinal cord in such a way as to enable us to treat a number of diseases which are at present altogether beyond the reach of our remedies."

The grandest principles that challenge human investigation center round the subject of therapeutics. Let us master every phase of it, that we may be better enabled to relieve our suffering patients. It is to be hoped that the therapeutic researches of the present generation will be followed by yet more brilliant achievement and by its light the darkness of passing illusions be happily dispelled.—*Dr. Geo. Butler, in Jour. Amer. Med. Association.*

NATURE AND SCIENCE.

How Small is an Atom?—This question, to the solution of which Lord Kelvin has more than once applied his mind, has just received a new answer, presented at a meeting of the Physical Society in London, by Mr. H. V. Ridout. The form of atom dealt with by Mr. Ridout is the smallest particle of matter that can take part in electrolytic action, and is sometimes called an ion. A number of ions go to make up an ordinary atom. Taking the element hydrogen, Mr. Ridout concludes that, in round numbers, 114,500,000 dissociated atoms, or ions, are necessary to form a line one centimeter long. In other words, the diameter of such an atom is about one-two-hundred-and-

A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your patients. Therefore, in the selection of your equipment you should exercise great care. The testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

Are the best and are adapted to all lines of regular and special practice. They are superior in workmanship and design, and include more conveniences than any other line on the market. (Catalogue " A " fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

A Sanatorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

Beautifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

MAPLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

---

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &c.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents.

Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

ninety-millionth of an inch. Lord Kelvin, after listening to Mr. Ridout, said the diameter of an ion, as above described, was almost exactly one-half of that which he himself had obtained for a molecule of hydrogen.

Niagara Will Not be Ruined.—Fears have sometimes been expressed that when the immense electric power installations at Niagara Falls are in complete operation, the withdrawal of water through tunnels will spoil the beauty and grandeur of the vast cataract. But an experiment recently made by the Niagara Falls Power Company, to ascertain the maximum capacity of its great tunnel, the current through which is calculated to develop at least 100,000 horse-power, shows that such fears are probably groundless. When a quantity of water, "twice as great as many notable rivers discharge," was sent through the tunnel, its diversion was not noticeable on the brink of the falls, for it was but a very small fraction of the water that comes down from Lake Erie.

Where Scientific Germany is Backward.—We have grown accustomed of late to think of Germany as a country in which practical science, fostered by careful technical education, occupies a very advanced position, especially in things based upon chemical knowledge. It is therefore somewhat surprising to learn, through Consul-General Mason, at Berlin, that fire-extinguishers, so commonly employed in the United States and Great Britain, are used to a relatively limited extent in Germany. Mr. Mason has discovered but one form of extinguisher made in that country, and it is comparatively inefficient. Lately, however, the German postoffice department has ordered 10,000 extinguishers of American make, and it is expected that the eyes of the people of the fatherland will be opened to their shortcoming in this regard.

"In practice of telegraphy," says *Cassier's Magazine* (December), "it is an easy matter to transmit messages automatically from one wire into another by means of what are termed repeaters, the current strength employed in that art being of sufficient strength to operate apparatus that virtually takes the place of the operator's ear and hand, at a repeating station. By the use of the repeater it is feasible to operate circuits extending over several thousand miles without human intervention. In telephony, however, the current available is so exceedingly weak that attempts to operate automatic telephone repeaters, or relays, analogous to those used in telegraphy over unlimited distances have been futile. . . . The value of a practical device of this nature in telephony is obvious, and as an incentive to inventors the president of one of the largest American telephone companies a few years ago offered a prize of $1,000,000 for a practical telephone relay, but without a successful claimant."

Honduras Rubber Vines.—In the Pija Mountains, Honduras, grow vines varying in diameter from four inches to two feet, and attaining a length of 100 feet, from which can be obtained a gum resembling that yielded by the india-rubber trees. Senor Davidi, the governor of the department of Comayagua, recentiy visited the region where the vines abound. He says that they thrive at great elevations as well as at lower levels in the valleys, and in his opinion the rubber produced from them is superior in quality to the Para article.

Exercise Without Apparatus
Taught by mail — in your own home

FREDERICK W. STONE
Athletic Director of The Stone School of Physical Culture
Formerly athletic instructor of Columbia College and the Knickerbocker Athletic Ass'n, New York. At present athletic instructor of the Chicago Athletic Ass'n, where he has classes daily from 12 to 1 and from 4 to 6. He established the world's record for 100 yards sprint (9 4-5 seconds) and held it unbeaten until 1902. Has been an instructor in physical culture for 22 years.

Mr. Stone's extensive experience with institutions of the highest character better qualifies him than any other instructor to teach men and women the science of self-development.

WE are successfully teaching men and women in every part of the world how to get well and how to stay well; how to broaden the shoulders, deepen the chest, and increase the lung capacity; how to improve the circulation; how to correct chronic complaints of the stomach and bowels; how to obtain sound, restful sleep; how to increase the weight or reduce it. We teach them how to obtain all this physical wealth by exercising only 10 to 20 minutes each day, just before retiring or upon arising. **The Stone Method** is a system of concentrated exertion, by which more exercise is actually obtained in 10 minutes than by the use of apparatus two hours, and embraces a thorough course in **deep breathing** without extra expense. **Does not overtax the heart.** The exercises are rational, moderate, and are taught by an instructor thoroughly versed in physiology. Individual instruction is given in every case according to the requirements of the pupil.

Follow our instructions and we promise you a fine, strong, well-developed physique, which bears every evidence of perfect manhood; a clear brain; a light step; a splendid circulation; a ruddy complexion; bright eyes; sound, easy-working lungs, with plenty of room in which to expand; an increased appetite; good digestion; an active liver; sound, restful sleep; an erect carriage.

WOMEN receive as much benefit from **The Stone Method** as men. However, no woman desires the same muscular development which she admires in men, which proves again the desirability of our individual instruction. We take into consideration the occupation, habits, mode of living, etc., and give instruction accordingly. We can insure perfect health, a good complexion, and, when desired, an increased chest (or bust) development; can increase the weight or reduce it; can fill out those hollow places and give the form that beautiful contour so much desired; can positively reduce the abdomen also.

We should like to hear from every woman who has enough interest in her health and in her perfect development to read this advertisement. We have some literature and testimonials which we will send FREE for the asking, and we are confident they will not only prove interesting, but convincing proof of the superiority of **The Stone Method** over any other system.

Mr. Stone is the only physical instructor paying special attention to women and children. He is ably assisted by Mrs. Ellen Walker, who has had a very extensive experience, and who alone opens and answers letters of a private nature. Confidential letters may be addressed **"Mrs. Ellen Walker, care The Stone School."**

ILLUSTRATED BOOKLETS AND TESTIMONIALS FREE BY MAIL

It is impossible, in this limited space, to convey an adequate idea of the importance of **The Stone Method** of physical culture in attaining and maintaining perfect development and good health. We have prepared a booklet for men and one for women which explain the system in detail, our plan of mail instruction, etc. These booklets contain many photos from life, showing what others have accomplished by **The Stone Method**. **SENT FREE BY MAIL**, together with fac-simile testimonials, measurement blanks, etc. Write today. The booklets will prove interesting.

The Stone School of Scientific Physical Culture

1687 MASONIC TEMPLE, CHICAGO, ILL.

LONDON: 4 Bloomsbury Street, New Oxford Street, W. C.

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED IN 1881—OPENED IN 1882.

The New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant, and the hospital wards adjoin the lecture rooms. Since the fire in 1896, a new building has been erected and thoroughly equipped, and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James P. Tuttle, M. D.; John A. Wyeth M. D.
MEDICIN —Isaac Adler, M. D.; Morris Manges M. D.; W. H Katzenbach, M. D.; J. D. Nisbet, M D.
GYNECOLOGY—J. Riddle Goffe, M. D ; Wm. R. Pryor, M. D.; Robt H. Wylie, M. D.; Brooks H. Wells, M. D.; W Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—Augus Seibert, M. D.
DERMATOLOGY—Edward B Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O Born M. D.; W. E. Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M D.; Robert C. Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederick Whiting, M. D.
UROLOGY—B. Sachs, M. D
OBSTETRICE—Edward A. Ayers, M D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York.

THE CHARLOTTE OBSERVER,

CHARLOTTE, N. C.

J. P. CALDWELL, Editor. DAILY AND SEMI-WEEKLY.

North Carolina's Foremost Newspaper.

Independent and fearless; bigger and more attractive than ever. The most complete telegraphic Press reports in existence. All the news of the world. Complete Daily reports from the State and National Capital

SUBSCRIPTION PRICE.

Three Months	$2 00
Six Months	4 00
One Year	8 00

THE SEMI WEEKLY OBSERVER, Published on Tuesdays and Fridays at $1 00 per year.

PRICE $33.50

It will pay you to send for our Catalogue No. 6, quoting prices on Buggies, Harness, etc. We sell direct from our Factory to Consumers at Factory Prices. This guaranteed Buggy only $33.50; Cash or Easy Monthly Payments. We trust honest people located in all parts of the world.

Write for Free Catalogue.

MENTION THIS PAPER.

CENTURY MF'G CO. DEP'T 352 East St. Louis, Ill.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

Samples and Literature supplied by

AGURIN
The Non-Irritating Diuretic.

EPICARIN
The Non-Toxic Dermal Parasiticide.

SALOQUININE
The Tasteless and Improved Quinine.

HEDONAL
The Promoter of Natural Sleep.

FERRO-SOMATOSE
The Ferruginous Nutrient and Tonic.

PROTARGOL
Antigonorrheal, Antiseptic

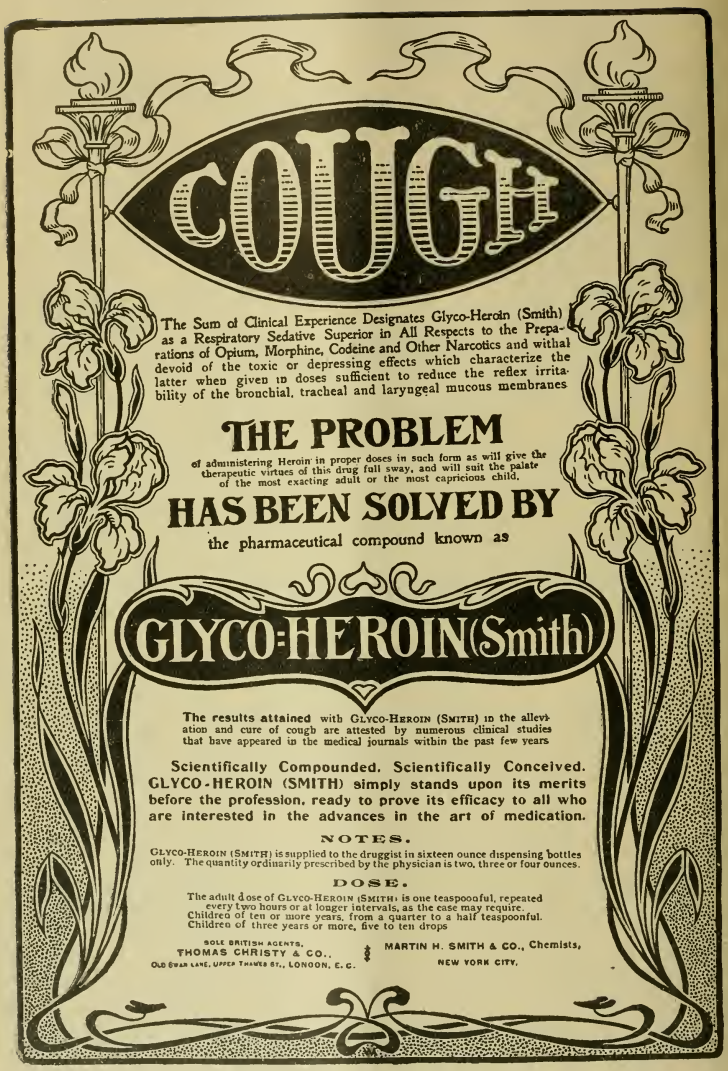
ASPIRIN
The Best Salicylate.

MELLIN'S INFANTS' FOOD

Mellin's Food babies have pink cheeks, bright eyes, sound teeth, strong limbs and firm flesh.

Our book, "The Home Modification of Cow's Milk," sent to physicians free upon request.

Mellin's Food Co. : : : Boston, Mass.


COUGH
The Sum of Clinical Experience Designates Glyco-Heroin (Smith) as a Respiratory Sedative Superior in All Respects to the Preparations of Opium, Morphine, Codeine and Other Narcotics and withal devoid of the toxic or depressing effects which characterize the latter when given in doses sufficient to reduce the reflex irritability of the bronchial, tracheal and laryngeal mucous membranes
THE PROBLEM
of administering Heroin in proper doses in such form as will give the therapeutic virtues of this drug full sway, and will suit the palate of the most exacting adult or the most capricious child.
HAS BEEN SOLVED BY
the pharmaceutical compound known as
GLYCO-HEROIN (Smith)
The results attained with Glyco-Heroin (Smith) in the alleviation and cure of cough are attested by numerous clinical studies that have appeared in the medical journals within the past few years
Scientifically Compounded. Scientifically Conceived.
GLYCO-HEROIN (SMITH) simply stands upon its merits before the profession, ready to prove its efficacy to all who are interested in the advances in the art of medication.
NOTES.
Glyco-Heroin (Smith) is supplied to the druggist in sixteen ounce dispensing bottles only. The quantity ordinarily prescribed by the physician is two, three or four ounces.
DOSE.
The adult dose of Glyco-Heroin (Smith) is one teaspooaful, repeated every two hours or at longer intervals, as the case may require.
Children of ten or more years, from a quarter to a half teaspoonful.
Children of three years or more, five to ten drops
SOLE BRITISH AGENTS.
THOMAS CHRISTY & CO.,
OLD SWAN LANE, UPPER THAMES ST., LONDON, E. C.
MARTIN H. SMITH & CO., Chemists,
NEW YORK CITY.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

PEACOCK'S BROMIDES

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.
DOSE:
One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—
CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day. **OD CHEM. CO., NEW YORK.**

St. Luke's Hospital,

1000 West Grace St.,
RICHMOND, VIRGINIA.

Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,
RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.

As The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our

. . . regular eleven-ounce hexagonal bottle, . . .

you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

THE THIRST AND NAUSEA OF ANÆSTHESIA

are entirely prevented, and the shock of surgical operation greatly relieved by high rectal injections of

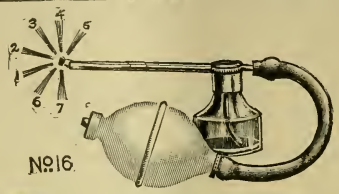
Bovinine

It should be administered with salt solution, heated to 70°F, an hour prior to operation, during same if shock is evident, and after returning patient to bed. The quantity of the injection must be suited to the individual case, varying from 2 ounces to 6 ounces of each. The salt solution renders the absorption of the ***Bovinine*** more rapid, and the heart action is immediately improved; the sustaining effect is continuous for two to three hours. The circulation which has become non-aerated through ether administration is oxygenated by the ***Bovinine,*** and rapidly restored to normal condition. Hence the absence of nausea and emesis. A postal will bring you our scientific treatise on Hæmatherapy, with reports of numerous cases.

The Bovinine Company,

75 West Houston Street, NEW YORK.

DeVilbiss Universal Atomizer No. 9. All Metal.—Will throw a spray in any direction desired. Heavy oils and vaseline by heating, light oils and watery solutions without. Can be used with rubber bulb or compressed air. **Price to Physicians, $1 25. Postage 6 cents.**



Two bottles furnished with this instrument. One to be used for water solutions and the other for oil.

The DeVilbiss Universal Atomizer, No. 16.—Unexcelled for patient's own use. **Price to Physicians $1 25.** Some of the advantages of the DeVilbiss Universal Atomizers over others are:

1. They throw a spray of any kind of liquid, oils, aqueous or alcoholic solutions.
2. The point can be turned in any direction, consequently it will do the work of three atomizers of any other style without extra tips, which are liable to be lost when you need them most.
3. By closing hole in cap on bottle with the finger, a very coarse spray or stream will be thrown which serves to clean it out or can be used for douching.
4. Medicine may be mixed in the bottle by closing the hole on cap of point with the finger, and turning on air current or compressing the bulb.
5. All parts are interchangeable; any part can be replaced that may be broken or lost.
6. Our improved connection enables them to be used with either a bulb or cut-off without extra fittings.

DIRECTIONS AND GUARANTEE TO PURCHASER.

To make aceptic, unscrew hard rubber piece, place in a carbolized solution and boil metal part and bottle.

To clean Spray Tube, put cleansing solution in cup, place thumb tightly over hole in cap on bottle and by using air pressure a heavy spray will be thrown from point of tube. Should this fail to clean the tube, unscrew cap "A" and remove particles with a tooth-pick. Be sure to run it through small opening as this must be kept clean in order to have perfect atomization. Should it not work, remove point "C" as shown in illustration with a knife blade; take out all particles with a pin or tooth pick from the openings in the point and replace in the same manner as removed with the letters "UP" on the upper side. Should this fail, return to us and we will repair or replace free of charge.

DeVILBISS MFG. CO., Toledo, Ohio.

BROADOAKS SANATORIUM,

MORGANTON, NORTH CAROLINA.
A Private Hospital for the Treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

ISAAC M. TAYLOR, M. D. JOHN McCAMPBELL, M. D.

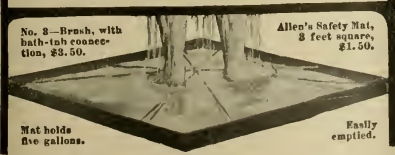
A Bath for Beauty and Health.

Allen's Fountain Brush and Bath Outfit

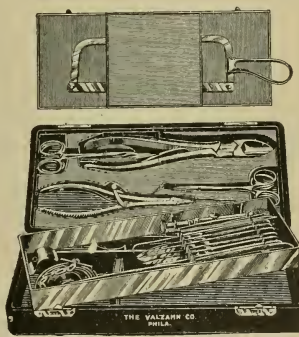
Friction, Shower and **Massage Combined.** The only Sanitary Bath Brush that at one operation thoroughly cleanses the skin, imparting a healthy tone and glow, and puts one in a condition to resist colds, la-grippe and all contagious and infectious diseases. Furnished either for bath tub connection, or with our fountain and Safety Portable Floor Mat. Enabling one to take a perfect spray and frictional bath in any room. With this outfit one is independent of the bath room, as a better bath can be taken with two quarts of water, than with a tub-full the old way. Insures a clear complexion, bright eyes, rosy cheeks, cheerful spirits, sound sleep. Should be in every home, and every travelers trunk or grip. Full outfit No. 2, consisting of Fountain Brush; combination rubber hot water bag; bath fountain and syringe and safety mat. Price $5.50.

Agents are making from $25 to $75 per week selling these outfits. Send for FREE booklet, "The Science of the Bath," prices and terms.

THE ALLEN MANUFACTURING CO., 429 Erie St., Toledo, O.



Valzahn Co.'s Amputating and Trephining Case.



Contents—1 Amputating Knife, 1 Scalpel, 1 Finger Knife, 1 Tenatome, 1 Curved Sharp Bistury, 1 Curved Blunt Bistury, 1 Tenaculum, 1 Grooved Director, 1 Pair Probes, 1 Trephine, 1 Tourniquet, 1 Dressing Forcep, 1 Amputating Saw, 1 Bone Forcep, 1 Needle Holder, 1 Straight Scissor, 1 Curved Scissor, 2 Pean's Haemostatic Forceps, 2 Tait's Haemostatic Forceps, 6 Needles, 1 Card Silk, 1 Coil Silver Wire, 1 Coil Catgut. All in fine Leather Case, $17.00. Knives are in Aluminum Rack removable to facilitate sterilization. **The Valzahn Company,** Manufacturers and Importers of Surgical Implements and Hospital Supplies, 132 South 11th Street, Philadelphia, Pa.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

THE LITERARY DIGEST

An Illustrated Weekly Magazine of information and discussion on all chief subjects of human interest, as digested from the world's choicest periodical literature. The intelligent of every rank and creed consider that for the most profitable periodical reading published it excels:

BECAUSE when time is precious it enables you to make the most of every reading moment, providing you with the cream of nearly 1,000 of the world's most valuable periodicals.

BECAUSE it selects, translates, digests, or reprints the best literature to be found in the numberless periodicals printed in all lands, giving its subscribers the benefit of expert editorial skill and discrimination.

BECAUSE it enables you to greatly economize your expenditures for periodicals, making it possible to get the best articles in a greater number than you would ever subscribe for, and this for the price of only a single subscription.

BECAUSE regular readers of THE LITERARY DIGEST become versatile on all sides of topics of current interest and discussion in politics, science, literature, art, religion, etc.

Send in Your Subscription Now for the Next Year. $3.00 per Year. Single Copies, 10 Cents.

FUNK & WAGNALLS CO., NEW YORK.

Table of Contents.

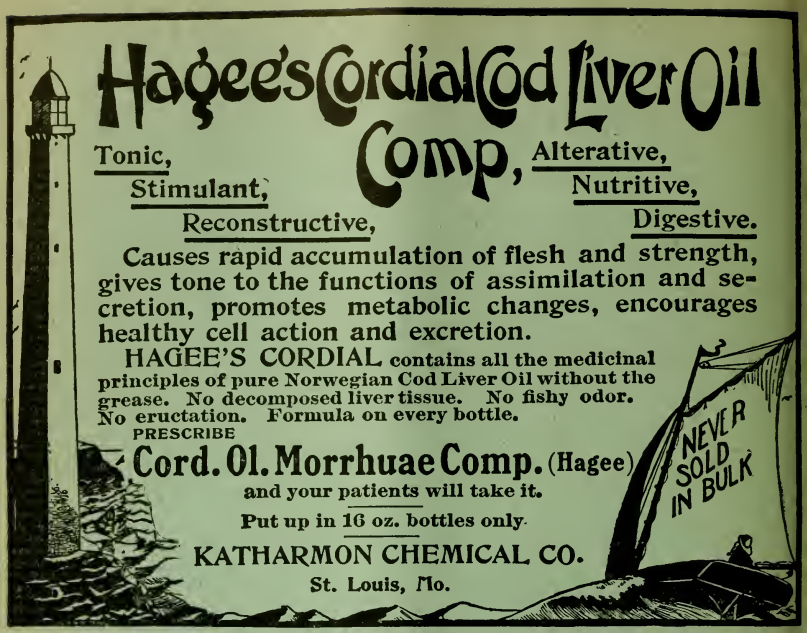
PAGE

EDITORIAL ABSTRACTS:

Railroad Accidents 157
Parallel Columns on Appendicitis 157
Vaginal Hysterectomy 158
The Difficulty of Eluding Newspaper Notoriety 159
Is this Wolf-Wolf? 159

ORIGINAL COMMUNICATIONS:

X-Rays in the Treatment of Superficial Cancer: Alfred L. Gray, M. D 162
The Diagnosis of Cutaneous Cancers: F. H. Beadles, M. D 164
Some Theories as to the Causation of Cancer: Greer Baughman, M D 165
Clinical Society of the New York Polyclinic Medical School and Hospital—Symptoms and Treatment of Calculus Anuria: E. L Keyes, Jr., M D. 169
SELECTED PAPERS 174
NEWER MATERIA MEDICA 180
BOOK REVIEWS 185
THERAPEUTIC HINTS 188
NECROLOGY 190
REVIEW OF MEDICAL AND SURGICAL PROGRESS 194
MEDICAL NEWS AND ITEMS 196


Hagee's Cordial Cod Liver Oil
Comp,
Tonic,
Stimulant,
Reconstructive,
Alterative,
Nutritive,
Digestive.
Causes rapid accumulation of flesh and strength, gives tone to the functions of assimilation and secretion, promotes metabolic changes, encourages healthy cell action and excretion.
HAGEE'S CORDIAL contains all the medicinal principles of pure Norwegian Cod Liver Oil without the grease. No decomposed liver tissue. No fishy odor. No eructation. Formula on every bottle.
PRESCRIBE
Cord. Ol. Morrhuae Comp. (Hagee)
and your patients will take it.
Put up in 16 oz. bottles only
KATHARMON CHEMICAL CO.
St. Louis, Mo.
NEVER SOLD IN BULK

Index to Advertisers.

	PAGE
Parke, Davis & Co. .....Cover	1
Lambert Pharmacal Co..... "	2
Mr. Fellows..... "	3
Presbyterian College for Women "	4
Glycosine Phosphate Co ..... "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.	1
Martin H. Smith Co	2
Peacock Chemical Co.....	3
Od Chemical Co.	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.....	5
DeVilbiss Mfg. Co.....	6
Broadoaks Sanatorium.....	7
Allen Mfg. Co.....	7
The Valzahn Co.....	7
Sharp & Dohme.....	8
Funk & Wagnalls.....	9
Katharmon Chemical Co.....	10
Mariani & Co.....	11
The Antikamnia Chemical Co.	11
Oakland Chemical Co.	12
Battle & Co.	12
University of Pennsylvania.....	13
The Halcyon Retreat.....	13
Kress & Owen Co.	13
The Purdue Frederick Co.....	14
Rio Chemical Co.	14
Wm. R. Warner & Co.	187
Charles N. Crittenton Co.....	189
Vapo-Cresolene Co.....	191
The Keeley Institute.....	191
Dad Chemical Co.....	191
Dr. A. M. Whisnant	193
Dr. John R. Irwin.....	193
Invalids Table Co.	193
The Tilden Co.....	194
Dr. E. R. Russell.....	194
Dr. A. J. Crowell.....	195
Dr. W. O. Nisbet.....	195
Dr. W. H Wakefield	195
The Presbyterian Hospital...	197
Sultan Drug Co.	197
Robinson-Pettet Co.	199
The Terry Heater Co	200
Clinic Publishing Co.....	201
W. D. Allison Co.....	205
Maplewood Sanatorium.....	205
Munn & Co.....	205
R. L. Polk & Co.....	205
Stone School of Scientific Physical Culture	207
N. Y. Poly. Med School and Hospital	208
The Charlotte Observer	208
Century Mfg. Co.....	208

Written Endorsements From More Than 8000 Physicians.

VIN MARIANI INTRODUCED NEARLY HALF A CENTURY AGO

"The Preparation which made Coca known as a remedy!"

Priority, Facilities and Processes of Manufacture

MAINTAIN MARIANI COCA PREPARATIONS UNIMITABLE.

AVOID "COCA WINES" Extemporaneously made with **Cheap Wine and Cocaine.**

Substitutes harm Patient and Physician and betray confidence in the unique properties of Coca

VIN MARIANI

Represents TRUE COCA with a Sound Nutritious FRENCH WINE;

An Adjuvant to all other Remedies in

Convalescence — Wasting Diseases — Neurasthenia

And Allied Conditions from any cause.

THE COCA LEAF

A PERIODICAL ADVOCATING THE RATIONAL USES OF COCA

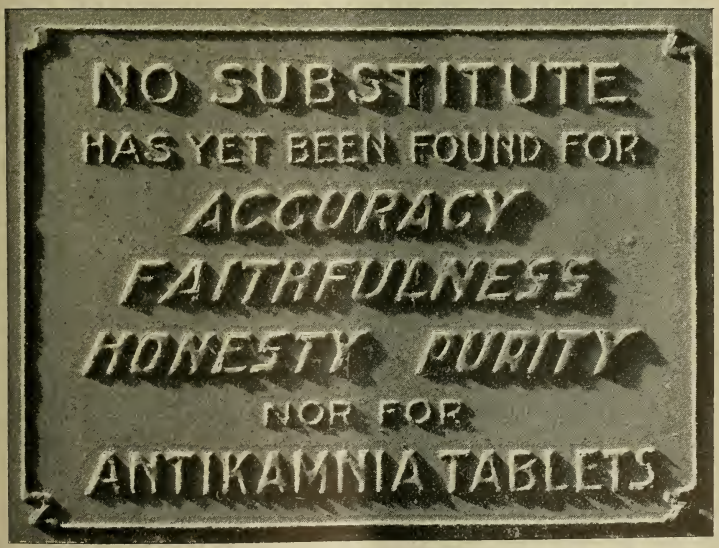
MAILED FREE TO PHYSICIANS ON REQUEST.

Inquiries from Physicians Receive Ethical Consideration.

MARIANI & CO.,

52 West 15th Street, New York.

PARIS LONDON, BERLIN, MONTREAL. Laboratories: Neuilly Sur-Seine, FRANCE



| AK | Antikamnia & Salol Tablets
Antikamnia & Quinine Tablets | AK | Antikamnia & Codeine Tablets
Antikamnia & Heroin Tablets | AK |

ECTHOL, NEITHER ALTERATIVE NOR ANTISEPTIC IN THE SENSE IN WHICH THOSE WORDS ARE USUALLY UNDERSTOOD. IT IS ANTI-PURULENT, ANTI-MORBIFIC--A CORRECTOR OF THE DEPRAVED CONDITION OF THE FLUIDS AND TISSUES.

SAMPLE (12-oz.) BOTTLE SENT FREE ON RECEIPT OF 25 CTS.

FORMULA:--Active principles of Echinacia and Thuja.

BROMIDIA
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U. S. A.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

University of Pennsylvania

Department of Medicine.

The 138th Annual Session will begin on the last Friday in September, 1903, at 12 m., and will end at Commencement, the third Wednesday in June.

The Curriculum is graded, and attendance upon four annual sessions is required.

Practical Instruction, including laboratory work in Chemistry, Histology, Osteology, Bacteriology, Pathology, Physiology and Pharmacy, with bedside instruction in Medicine, Surgery, Gynæcology and Obstetrics, is a part of the regular course, and without additional expense.

For catalogue and announcement containing particulars, apply to

DR. CHAS. H. FRAZIER, Acting Dean,

36th St. and Woodland Ave., Philadelphia.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.

Dr. W. F. Goldsmith, General Surgery.

Dr. C. C. Stockard, General Medicine and Drug Habits.

Dr. S. G. C. Pinckney, Nervous Diseases.

Dr. J. M. Crawford, Eye, Ear, Nose and Throat.

Dr. Michael Hoke, Orthopoedic Surgery.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

17 W. Cain Street, Atlanta, Ga.

THE ALKALINITY OF BLOOD SERUM

GLYCO-THYMOLINE

(KRESS)

ASEPTIC
ALKALINE, ALTERATIVE

A Purgative for Mucous Membrane

INDICATED IN ALL CATARRHAL CONDITIONS

HASTENS RESOLUTION
FOSTERS CELL GROWTH

SAMPLES AND LITERATURE ON APPLICATION

KRESS & OWEN COMPANY, 221 Fulton St., New York.

FIRST OF ALL

insist on rest and freedom
from care; then always prescribe

GRAY'S Glycerine TONIC Comp.

This, authorities state, will,
if persistently followed, overcome
any case of general debility, nervous
exhaustion or neurasthenia.

THE PURDUE FREDERICK CO.,
No. 15 Murray Street. New York.

A Useful Nerve Stimulant and Tonic.

CELERINA is a powerful stimulant WITHOUT the depressing AFTER-EFFECTS of alcohol, caffeine, nitro-glycerine, etc. It is also a reliable Nerve Tonic. A pleasant exhilaration is experienced after a dose of one or more teaspoonfuls, and under its continued use a renewed capacity for mental and physical exertion results. It is indicated in all forms of exhaustion, mental inertia and senile weakness.

DOSE: One or Two Teaspoonfuls Three Times a Day.

A SAMPLE BOTTLE SENT FREE TO ANY
PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

RIO CHEMICAL CO., - - NEW YORK.

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., APRIL, 1903. No. 4

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

Subscription $1.00 per year, in advance.
Subscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
Receipts. The receipt of all money is immediately acknowledged.
Important Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it continued expecting to receive a remittance at their earliest convenience.
We Notify all subscribers when their paid subscription expires.

EDITORIAL ABSTRACTS.

RAILROAD ACCIDENTS.

The *Medical Examiner and Practitioner* comments editorially upon the appalling contrast between the number of people killed in this country by the railroads and those killed by the English railroads. The railroad business in this country is far ahead of the foreign roads in many particulars, possibly in all respects except the mortality rate, but here we seem woefully behind. The United States contains the greatest railroad systems in the world, managed by the ablest railroad men in the world, but hitherto their energy and ability has been spent principally in extending the gigantic properties under their control, while, apparently, too little thought has been devoted to the preservation of human life. It is a trite saying that there is greater safety in ocean travel in the present day than in that by the railroads.

It is certainly to be hoped that the future will show a greater appreciation of the value of human life upon the part of the railroads of the United States.

The report upon which the *Examiner* comments is that of Mr. Campbell, in January of this year, to the shareholders of the London & Southwestern Railroad. Not a single passenger was killed in Great Britain during 1901, while in this country, during the same period 249 were killed. In England 476 passengers were injured in 1901, against 4,129 in the United States. The report further states that while the railroad mileage is nine times as great in the United States the English roads carried twice as many passengers or about 18 times as many per mile.

PARALLEL COLUMNS ON APPENDICITIS.

Dr. F. Harrison in *The American Journal Surgery and Gynecology* gives the following summary of the divergent teachings on appendicitis of two prominent New York Surgeons, suggesting that in the presence of such a diversity of opinions it would be wise to go to see each other operate and thus reach a more uniform method. The conclusions to be based upon results. As it

is now medical visitors to New York are left to decide for themselves upon many of the questions at issue.

The "deadly parallel" is as follows:

DOCTOR NO. 1

1. Appendicitis cases should be operated upon at the earliest moment after the diagnosis is made, for the best results.

2. Cases in advanced stages when first seen should usually have the benefit of operation.

3. It is best to separate the abdominal muscles by blunt dissection, rather than by cutting, excepting where very long incisions are necessary.

4. It is best to leave the incision open in septic and suppurating cases, even though we run the risk of hernia afterward.

It is the safer method, and gives drainage freely.

5. It is the best to use gauze drainage freely, to keep septic regions well open and apart for drainage.

6. Iodoform is particularly valuable in connection with gauze drainage, as it keeps the wound in better condition, and helps to overcome local sepsis. It is not dangerous in itself if watched.

7. Rubber gloves worn by the operator are a great protection of the patient, because the hands can be kept aseptic.

8. If we have plenty of room for working by sight we shall do less damage than by working by touch through small incisions, particularly in adhesion cases. If hernia results it can be easily repaired, if not prevented by provisional sutures.

DOCTOR NO. 2.

1. Agrees on this point.

2. Agrees on this point.

3. Agrees; but seldom needs long incisions.

4. The safest method is to close the incision, nearly or completely, and to depend upon leucocytosis and management of the peritoneum. Hernia is also prevented.

5. It is never necessary to use gauze packing. It injures peritoneum, causes shock by its presence and when dressings are changed, and leaves an opening for hernia.

6. Iodoform is not only unnecessary, but is particularly dangerous in the peritoneal cavity.

7. Rubber gloves make need for longer incisions, require slower work and are unnecessary because fresh blood serum makes the field soon aseptic.

8. If we work by touch through short incisions we do less damage than by working through longer incisions by sight, cause less shock and avoid hernia; particularly in adhesion cases.

There are many minor points in technic over which these two authorities hold widely different views, and both are showing their methods publicly to numbers of visitors to their clinics. Each operator does his work easily and well in his own way, but there must be a difference in actual results between the two methods, and that is a vital point when we have patients or friends to be advised.

Which shall it be?

VAGINAL HYSTERECTOMY.

Dr. W. H. Humiston, of Cleveland, Ohio, gives the following as his views upon the class of cases in which the lower route for hysterectomy is preferable:

"The value of the vaginal operation in those cases where general physical conditions would make one hesitate to advise an abdominal section is apparent, especially in the following groups:

1. The length of time in which the

patient is being subjected during an operation should always be considered as a factor against the employment of the unessential elements of technic. The longer the time of operation the greater the depression, the larger the amount of anesthetic, the longer exposure, the more handling of parts which must necessarily give an increased reflex action occasioning shock.

2. In thick belly walls the difficulty in which the pelvic organs are brought into the wound necessitates more or less bruising of the wall—a source of danger to infection. The poor blood supply of fatty tissue is another element of risk in the proper repair of a wound.

The contra-indications to any vaginal procedure excepting merely for drainage of an abscess cavity is the presence of adhesions above the brim of the pelvis.

In the case which I am about to report, however, the general condition of the patient was such that notwithstanding the evidences of adhesions outside of the pelvis, hysterectomy was performed by the vaginal route with a very satisfactory recovery, whereas the result, I am sure, would have been disastrous had an attempt been made to remove the diseased organs through an incision in the abdominal wall."—*Am. Jour. Surg. and Gyn.*

THE DIFFICULTY OF ELUDING NEWSPAPER NOTORIETY.

We feel that members of our profession have often been unjustly accused of conniving at extravagant newspaper accounts of their professional achievements. We are confirmed in this feeling by the perusal of a long and highly seasoned article which appeared in *The Philadelphia North American* for March 5th under the following sensational headings: Cut Off a Third of Patient's Body; Rare Operation Performed First time in America by Local Surgeon; Knives Used Three Hours; Amphitheatre at Jefferson College Crowded with Experts and Students; Great Skill Required; Life of Sufferer Saved Several Times by Use of Salt Solution." The "local surgeon" was Dr. W. W. Keen, an ex-president of the American Medical Association. If such a man, operating in the amphitheatre of the Jefferson Medical College, is powerless to protect himself against the minions of the press, can we reasonably accuse our lesser lights of collusion in like cases? The operation was amputation of the entire lower extremity, together with a portion of the pelvis, for osteosarcoma.—*N. Y. Med. Jour.*

IS THIS WOLF-WOLF?

For years the medical journals have been trying to convince the practitioner of the widespread evil of substitution and adulteration in drugs. But the profession has turned a half credulous, half indifferent ear, as if bored at the familiar sound of "Beware of Substitution," and "None genuine without this mark." They have in some instances hinted that it was necessary for the journals to support their advertisers; and have firmly believed that the adulterations were confined to proprietary medicines put up in labeled bottles and taken at the public's risk.

How many physicians make a practice of going behind the scenes and watching the preparation of a prescription, and how many if they did so would be able to tell by the form in which the crude drugs were handled whether they came originally from reputable sources, or whether they were bought by the

honest but misled druggist, from middlemen who successfully adulterated their wares?

From the laboratories where the exact potency of an absolutely pure drug is determined for endorsement in the United States Pharmacopœia, to the druggist's counter where supposably the same potency is being handed out on a physician's carefully written prescription there is often so wide a variation that one wonders whether it would not be safer for us to go back to the days of herbs and simples, and to cull and brew our own remedies.

At last the health department of New York has brought to the attention of the medical profession through the daily press, a forcible reminder of the widespread practice of substitution and of the adulteration of drugs. The medical profession has for years been thwarted in the greatest emergencies by the false values of the remedies furnished to their patients in their prescriptions. But the public has treated them with that tolerant, easy-going air of good-natured understanding, as though one should say "It *is* hard to see another man getting one's profits," and has given the warning no more thought than would be bestowed upon a patent medicine vender's earnest plea to "Take no other," and "Beware of substitutions."

Commissioner Lederle has set in operation a wholesale examination of the stuff that is commonly sold as phenacetin. His physicians and staff have purchased phenacetin powders from 373 drug stores, in Manhattan and Brooklyn. The official report gives the names of all, and includes many well-known drug stores, and department stores. *Among these samples, only* 58 *were found to be pure phenacetin, while the greater number,* 315, *were adulterated.* The chief adulterant was found to be acetanilid, selected undoubtedly because of its cheapness, and its similar effects, in part, to phenacetin.

In the sale of an ordinary ten-grain pure phenacetin powder, the druggist makes a little over 200 per cent. He buys the phenacetin at $1 per oz. and retails it in small quantities at $3.20 per oz. If his adulterant be acetanilid it is bought at the rate of 2½ cents an ounce, leaving him his sales almost clear. This mean and petty money traffic need not, however, be laid at the door of the retail druggist alone. It is important to lay the blame, however, where it is due, for the question is one with a double moral issue. The physician does not trouble himself about the druggist's profits or his sense of honor in dollars and cents; but he has his patient's health in his hands, and when he finds, if he ever does learn, that a cheap heart depressant such as acetanilid given in his prescription instead of the drug on whose certain action he is depending, he is justified in his honest indignation.

This is by no means a single instance. Nearly every drug in the Pharmacopœia is adulterated, and as such fails to give the desired action. So great has this evil become that we often confess to one another that we prescribe less and less, and confine ourselves to a few fundamental drugs, remedies which we think we obtain from reliable sources and give in cases of necessity, leaving our patients to take their favorite compounds of tonics and appetizers on their own responsibility.

If drugs could be treated sacredly, exactly, and conscientiously by the druggists, and by the public, as they are in hospitals, in experimental laboratories, and as physicians themselves treat them, the practice of medicine

would be a much more satisfactory profession than it is at present.

We trust that in this particular case the New York Board of Health, which does nothing by halves, will trace this scandal to its source, and further, we hope that physicians and druggists will prove as energetic as are the manufacturers of cereals and baking powders in establishing pure food laws, and will bring the enactment about pure drug laws, that will at least serve as a warning to offenders, and a caution and protection to the trusting prescribers and buyers of drugs.—*Editorial in Medical News.*

MISCELLANEOUS.

The Olive Oil Treatment of Gastric Ulcer.—Walko (*Centralbl. f. Inn. Med.*, 1902, No. 45.)—Olive oil, as is well known, when taken into the stomach diminishes the secretion of hydrochloric acid, and has been found useful in cases of hyperacidity. Walko strongly advocates its use in gastric ulcer. The patients are put to bed, are fed per rectum, but are given olive oil by mouth three times daily. The initial dose is a tablespoonful, which, however, if the patient tolerates the oil, is gradually increased to three tablespoonfuls. After swallowing the oil the mouth is rinsed out with some well tasting solution. Where its administration gives rise to much nausea, the oil may be given through the stomach-tube. In such case, three to seven ounces are introduced in the form of a thorough emulsion. After the more severe symptoms of ulcer have disappeared, Walko carefully and gradually returns to feeding by the mouth, but for another two weeks also continues the administration of the oil. According to his view, gastric ulcer heals decidedly more quickly under this regime than under any other.

Conduct of the Naval Medical Officer During an Action.—In the din of battle, with men falling thick around their guns, temporary aid is all the surgeon can render. When the last gun is fired his real work will begin, and it will be imperative on him to expose himself to risk of injury or death during the action as little as possible. By moving about, however, in the protected parts of the ship with such necessaries as he can carry, he can render much useful service. To remove the seriously wounded from the various decks to the dressing stations during the action will be impracticable. For many reasons the use of stretchers will be rendered impossible, and all the bearers can do will be to assist by hand the less seriously injured to the dressing stations.—*Staff Surgeon Colborne, R. N., in the British Medical Journal.*

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

The Carolina Medical Journal

COLLABORATORS.

H. T. Bahnson, M. D., Salem, N. C.
J. Howell Way, M. D., Waynesville, N. C.
J. Allison Hodges, M D., Richmond, Va.
S. Westry Battle, M D , Asheville, N. C.
Geo. G. Thomas, M. D., Wilmington, N. C.
J. P. Munroe, M. D., Davidson, N. C.
Manning Simons, M D., Charleston, S. C.
S. C. Baker, M. D , Sumter, S. C.
R. L. Payne, M. D., Norfolk, Va.
H. S. Lott, M D., Winston, N. C.
J. W. Long, D. D , Salisbury, N. C.
H. A. Royster, M. D , Raleigh, N. C.
Albert Anderson, M. D., Wilson, N. C.
Francis L. Parker, M. D., Charleston, S. C.
Chas. W Kollock, M. D., Charleston, S. C.
Davis Furman, M. D., Greenville, S. C.
F. Julian Carroll, Summerville, S. C.
Translation and Foreign Reviews, Richard H. Whitehead, M. D., Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.

Contributors for the Original Department of The Journal are received, with the understanding that they are contributed exclusively to this Journal.

Illustrations necessary to elucidate the text will be provided without expense to authors when suitable ink drawings or photographs are furnished.

Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

X-Rays in the Treatment of Superficial Cancers.*

By Alfred L. Gray, M D., Richmond, Va., Professor of Physiology in the University College of Medicine.

That the Roentgen ray is an agent of the most powerful thereapeutic value in at least some forms of skin disease, has, by all who have had any considerable experience in this method of treatment, ceased to be a matter of doubt.

Of the graver forms of skin affections, the treatment of which by radiotherapy has proven successful, I mention especially lupus vulgaris and erythematosus, psoriasis, xeroderma pigmentosum, eczema resisting other therapeutic agents and epithelioma.

Since the subject assigned to me is limited, I shall briefly discuss the treatment of the more superficial forms of cancer. The forms in which the most uniformly good results have been reported, have been those forms amenable to treatment by excision with the knife, the application of caustic pastes and of the actual cautery. This fact caused the belief that in order to obtain beneficial results an actual "burn" must be produced, consequently in the treatment of cases by the X-ray, the length of exposure necessary for a tube of definite resistance to produce this effect was ascertained and an attempt was made to produce a burn of gradually increasing severity until a certain depth was reached. This was indeed a most tedious and time consuming method of cauterizing. Further experimentation, however, has demonstrated conclusively the fallacy of this theory. The exact *modus operandi* of the rays on the diseased tissues has furnished a subject for much speculation, some being of the opinion "that the effect is produced by the projection of molecules into the tissues;" some, that electrical discharges or waves emanating from the tube are the active agents; some that the tissue elements are made to vibrate in a man-

*Read before the Richmond Academy of Medicine and Surgery February 24, 1903.

ner different from their normal molecular motion with a resulting molecular disintegration; some, that the ultra-violetray is produced "within the tissue by a process of interference;" others, that ozone is liberated in the tissues by the X-rays.

The most generally accepted theory is that the "rays are composed of negatively charged corpuscles or electrons." The theory of the bactericidal action of the rays has been practically abandoned. Whatever be the correct theory, the fact remains as shown by recent experiments of Dr. Ellis, of the Jefferson Hospital, that a distinct and marked degeneration results in the diseased tissues subjected to the action of the rays, resulting in a replacement of the malignant tissue by fibrous or adipose tissues and this change may be produced without subjecting the patient to the suffering and inconvenience not to mention the scars resulting from sloughing of tissue incident to a burn.

Our object being to produce a cure *tuto, cito et jucunde,* if the cure is as certain and the after appearance of the diseased area better, we may sacrifice rapidity for safety, pleasantness and good cosmetic effect. The idea of producing an actual destruction of tissue by the so-called X-ray burn has therefore been abandoned. Authorities differ in the amount of "reaction" desirable, but it seems generally preferable to make the exposures long enough to produce a slight hyperaemia as is seen from exposure to the sunlight and as in the case of exposure to sunlight, a subsequent "tanning."

It is not my desire to go to any length into the technique of the treatment of these cases but a few practical points may be at least referred to. The healthy skin surrounding the diseased area must be protected by some substance more or less opaque to the rays. The materials most commonly used are lead foil and rubber sheeting (1-16 to ¼ inch in thickness). An opening is cut into the protective sufficiently large to expose the diseased area and a small band of healthy skin surrounding it. Rubber is to be preferred as it does not attract electricity and the patient is therefore less liable to slight shocks that are sometimes experienced when foil is used. Short exposures should be made at first, five to ten minutes or less, at a distance of eight to ten inches from the anti-cathode or platinum plate. These should be made every third day for a series of four or six exposures and an interval of ten days or two weeks allowed to elapse in order to determine whether or not the individual possesses any unusual susceptibility to the rays. After this the length of exposures should be gradually increased if no ill effects are present and the distance from the tube reduced to six inches or less.

The effects of treatment become manifest within time limits varying from almost immediately to six or eight weeks and should be kept up as long as any improvement whatever is noticeable and for some time after healing is apparently complete. The first effect is relief to a greater or less extent of pain. Then follows lessening of the discharge if such be present, a drying up of the diseased tissue and scaling off in the form of a crust, the lesion contracting at the periphery, and an ultimate *restituto ad integrem* with scarcely a resulting scar.

As in every other diseased condition there are cases of external cancer that defy this as well as all other forms of treatment. Thrice happy would we be if we possessed a single remedy that would be an absolute specific in every

case of any disease. If then, in a malady of such a serious nature as carcinoma, wherever its location, we discover an agent that effects a cure in a large percentage of cases, is it not worthy of a most careful and thorough consideration?

The cases least favorable for treatment by radiotherapy are those that have progressed until the whole system has to a great extent lost its vigor and the vitality of the tissues is so impaired that their reparative power is forever gone. However, this is an almost indeterminable problem as has been shown by the recovery of many cases considered hopeless. Is there any case then, that is not worth the trial?

It is well to bear in mind that not infrequently, from too short exposures, the diseased tissues are stimulated and the progress of the malady hastened. The remedy should, therefore, be faithfully and skilfully administered lest evil rather than good result.

If, gentlemen, in this brief and unsystemized paper I have succeeded in arousing your interest in this most interesting subject, I shall consider myself amply repaid.

REFERENCES.

Williams, The X-ray in Medicine and Surgery. Zeisler-Radiotherapeutic Observations (Medical Journal, Philadelphia, February 21, 1903). Franklin, The X-ray (Med. Record, October 25, 1902). Newcombe, Philadelphia Med. Journal, January 10, 1903. Leonard, Ibid, February 14, 1903. Hyde and Montgomery—J. A. M. A., January 3, 1903. Allen, Monograph. The present status of Radiotherapy in Cutaneous Disease and Cancer. Hall-Edwards, Archives of the Roentgen Ray, December, 1902.

The Diagnosis of Cutaneous Cancers.*

By F. H. Beadles, M. D., Richmond, Va
Lecturer on Diseases of the Skin and Professor of Pharmacognosy and Botany, Medical College of Virginia.

There can be no question that the establishment of an accurate diagnosis is essential to the successful management of morbid growths of the skin. It is a common error that the sole requisite for determining such a diagnosis is the exhibition of the affected portion of the integument, and that the physician shall be able, by merely viewing the surface for a few minutes, to pronounce definitely the nature of the disease and determine the therapeutic measures to be adopted. But much more than this is essential, as much so as in the investigation of diseases involving any other organ of the body.

Three almost indispensable aids in obtaining a correct diagnosis are: a good light, a good eye and a microscope.

If possible, secure a history, past and present, of the physical condition of the patient, his parents and his children. Note his age and occupation and whether married or single. Unless these facts are taken into consideration, the management of the case must be haphazard, unscientific and culpable.

The principle diagnostic points of cutaneous cancer are: 1. The advanced age of the patient. 2. The beginning of the disease as a wart, mole, nodular or scaly patch. 3. The usual slow progress of the disease. 4. The single character of the growth. 5. The striking appearance of its border, which is of a pearly hue with roll-like elevations or a hard elevated filtration. 6. The scant and in the later stages, viscid discharge frequently streaked with blood. 7. The

*Read before the Richmond Academy of Medicine and Surgery February 24, 1903.

situation of the affected portion, usually the nose, eyelids and frequently involving portions of the face.

The conditions which simulate cutaneous cancer are: Syphilis, lupus and Baelzer's disease.

The syphiloderm which bears a most striking likeness to a skin cancer, is the tubercular ulcerating form. Its distinguishing features are: 1. Its more rapid growth. 2. Its multiple lesions consisting of several superficial ulcerations, rarely round in shape but segmented or irregularly circinate. 3. The presence of tubercles which have not undergone destructive changes. 4. Its usually free discharge of a distinctly pustular character. A pronounced symptom of a syphilitic ulceration is a strong tendency to reparative cicatrization, due partly to the exhaustion of the infective and partly to an insufficient but modifying treatment.

Lupus vulgaris is a disease which usually develops in youth and rarely after the age of thirty-five. It presents a tubercle of a reddish-brown color and of a soft consistency. In the earlier period of its career, it is more diffuse than cancer, while in the ulcerating stage its edges are often bordered by non-ulcerating papules. The presence of the bacillus is revealed by the use of the microscope.

Baelzer's disease was, for a long time, rather confusing to me, as the literature on the subject is rather limited. It is a chronic affection of the mucous glands of the lip, marked by an indolent swelling and infiltration of the periglandular tissue, and a slow ulcerating process extending from above downward. There is also present a catarrhal inflammation of the mucous membrane of the lip.

The distinctive points of the disease are: 1. The absence of general systemic disturbance. 2. The absence of implication of the neighboring lymphatic glands. 3. Its ready response to simple treatment, as the application of tincture of iodine.

Some Theories as to the Causation of Cancer.*

By Greer Baughman, M. D., Richmond, Va , Lecturer on Hygiene, Demonstrator of Pathology and Physiology, Medical College of Virginia; Member of State Medical Society, Tri-State Medical Society of Virginia, North and South Carolina, American Medical Association, Southern Surgical and Gynecological Society, etc.

Such an intimate acquaintance has the world had with malignant ephithelial neoplasms, that a familiar household name has been given them. "Karkinos" or crab was the name used by Galen to signify such sores of the breast as were characterized by malignancy, by tendency to return after being removed, and by rapidity of growth. The Germans call cancer "krebs," which means crab. Sanscrit—"Karkata" and "Karkataka," used in the same sense, meaning crab, applied to cancers. In Hindustanee "Kark" (crab) is used in the same sense. All of these people had in their mind a description of the disease as well as a name for it.

From the examinations of Bischat, Lobstein and others, Laennec supported the idea that cancers were heterologous, in other words, that they were different from the cells of the body. J. Muller locked horns with him, for he demonstrated that the cancer cells were were identical with the normal, physiologically acting cells of the body. It was the brilliant and many-sided Virchow, however, who finally established beyond contradiction that the cancer

*Read before the Richmond Academy of Medicine and Surgery February 24, 1903.

cell as well as all tumor cells, were identical with the cells of the body, and who gave a new meaning to homologous and heterologous—making homologous mean tumors that grew among similar and heterologous mean tumors that grew among dissimilar cells from themselves. But he defended the idea, and for his whole life believed that cancers were of connective tissue origin.

This theory of his was energetically and bitterly opposed by such men as Tiersch and Waldeyer. Virchow's reputation was so well known and his defense was so masterly that only in the last few years have scientists given up the connective tissue origin theory. There are today but few, if any, pathologists who do not believe that cancers are of epithelial origin.

Of the many opinions as to the causation of cancer that have been advanced since the time of Galen, the ones that have had the most facts to support them are, 1. The Parasite; 2, Tiersch's theory; 3, Cohnheim's; 4, Hauseman's; 5, Ribbert's; 6, Wakefield's and 7, the Bacteriological.

Virchow overturned the parasite idea when he established the fact that all cells of tumors find their prototype in the human body. Before discussing the other theories as to exciting causes, it might be well to discuss briefly the usual place of finding cancers and to mention some of the predisposing causes.

It has been noted, after many years of investigation, that cancers select certain organs for their primary growth in order of their frequency, the uterus (vaginal portion); outer skin (lip, ear, eyelid, cheek, extremities); female breast (much seldomer, the male breast); stomach, (pyloric end, seldomer the cardiac, and rarely the fundus); rectum, oesophagus; ovaries, outer genitalia; penis; scrotum; clitoris; labium majus; vagina; prostate and bladder; testicle and epididimus; abdominal viscera (particularly the pancreatic head); small intestine; gall bladder; gall ducts; liver; thyroid gland; kidney; bronchi; lungs; tube; ureter; vesiculae seminales; ventricles of brain; dermoid cysts; bone, etc.

Almost every patient suffering from a cancer, particularly where the cancer is superficial, will give the history of some injury to the affected part. So prominent is this fact that at one time it was generally believed that direct violence was the cause of cancer. The causative effect of age will be discussed later. Sex as a predisposing cause cannot be elaborated any more than mentioning the facts that men are more subject to injury, if that be a cause of cancer, while women bear and suckle the babies. Race seems to have something to do with the appearance of this dread pathological lesion. Hygienic surroundings and contact no doubt have their bearing, and a run down condition certainly does.

Carcinomas occur usually in old people; Tiersch used this fact as the foundation upon which he built his theory. He believed that the initiative for cancerous growth came from the epithelium, but that lessened resistance on the part of the connective tissue stroma helped. He theorized that this lessened resistance was due to a poor blood supply, which would be the case of those suffering from solerotic arteries and the like, consequently cancers were found almost exclusively among the older people.

Cohnheim explained the tendency on the part of the cancer cells to proliferate as due to the embryological nature of their cells. He believed that all tumors originated in the same way by as-

suming that more cells were manufactured than were necessary for building the organs of tissues of the embryo; so long as the normal physiological cells were actively doing their allotted duty and were healthy, the embryological-excess-cells had no chance to grow. Just as soon as the physiological cells ceased to multiply to increase the size of the organ or tissues, but more particularly when the tissues began to degenerate from age, the embryological-excess-cells commenced to assert themselves and being embryological in character, their growth was rapid. From Cohnheim's theory, we would naturally expect to find tumors either about puberty or in old age or whenever the body got into a run-down condition. This theory was substantiated by a series of experiments conducted by Leopold who attempted to grow a piece of cartilage taken from a full grown Guinea pig in the abdomen of another. The experiment failed. But when a piece of cartilage from an embryological Guinea pig was used, an enchondroma was grown.

Houseman, of Berlin, who knows more about tumors than any living man, in my opinion, explains the origin of tumors by the theory that certain epithelium undergoes a retrograde metamorphosis, taking on the growth characteristics of the embryological cells, and losing in part, if not wholly, their secretive and other properties. They, in this way, have gained growing powers at the loss of their differentiating and functionating properties. This is known as the "anaplasia of cells."

Ribbert assumes that the first changes in beginning carcinomas take place in the connective tissue, which for some such reason as chronic inflammation or hypertrophy cuts off certain epithelium from its accustomed associates. These cells not being in their usual place and having now no especial function to perform, grow to be tumors.

A more recent theory of Wakefield might be mentioned at this point. He believes that gelatiniform tissues as observed in neoplasms and elsewhere, invariably represent a stage of degeneration of tissues once healthy, the said degeneration bearing no relation whatever to the embryology of the tissues. The conditions responsible for the increase in the involved tissues is a retardation of katabolism. He also believes that tissues are subject to tumor formation in inverse ratio to their katobolic digestibility being aided by an alkaline medium.

To illustrate these theories in a practical way, Cohnheim's would be a man who was born with the desire to steal; this desire was kept in subjection for fear of punishment by laws formulated by his neighbors for their mutual protection; opportunity presenting in such a way that he thinks he will not be caught, he steals, the habit then grows on upon him until presently he is found out, punished, and looked upon by his neighbors as an outcast—a tumor.

Houseman's theory is the citizen, that allows his passion to take away his energy and desire to work; he degenerates into the bum found at every almshouse, who gets fat at the expense of the community.

Ribbert's idea of cancer causation might be likened to the cancer quack, who began legitimate practice with bright prospects and many friends, but who, because of the desire to get rich quickly, cut himself off from the honorable practitioners, by this very cutting off losing the desire to uphold the dignity of the profession, to further the good of his fellow doctors and of the community as a whole, and expended

all his energies in amassing a fortune, preying as does the tumor on the organism of the Commonwealth.

Wakefield's theory is the man that accumulates a fortune by failing to pay his debts. All of us could be tumors of this kind in a short time if we could only get credit.

Many different bacteria as causes of cancer have been described; with none of these except the blastomycetes of Leopold have I any personal knowledge, so, as the time is limited, I shall call your attention to these alone.

Geheimrath Leopold of the Frauen Klinik, Dresden, along with his assistant, Dr. Rosenthal, began investigations to ascertain if there were a causative bacterium for cancer early in 1894; not until 1900 did he read his paper before the Medical Congress at Paris publishing his complete investigations to the world.

The material examined was taken from body-warm cancers, removed from various parts of the body, scrapings from the innermost portions were taken with aseptic precautions. These scrapings were examined upon an especially constructed warm microscopic stage in sterile beef tea, normal salt solution, or blood serum. Among fatty degenerated cancer cells, were found particles with double contour, some of which were filled with yellow pointed or long drawn out particles, highly refractive. These particles seemed to have a peculiar motion; all did not move at once, the motion began at the periphery. After they had been moving some time, suddenly a particle pushed through the covering membrane of the cell, the others followed, but no lesion of the cell wall was to be seen. Other particles formed, and this cycle of proceedure would continue for hours. It was not necessary to keep the temperature constant for this process to take place.

In 1898 Leopold reported that he had observed a hanging drop made of freshly prepared carcinomatous tissue in sterile bouillon for 200 consecutive days.

In 1900 the same observer showed pure cultures of blastomycetes obtained from human cancers; likewise tumors in animals which were produced by pure culture of these same blastomycetes obtained from human cancers. The blastomycetes obtained from the tumors of the animals were identical in appearance, in staining peculiarities, and in growth with those obtained from human. To make the circle complete, the blastomycetes derived from the animal cancers must be injected into and produce tumors in other animals or in man, which shall likewise contain blastomycetes identical with the others.

The procedure of growing these blastomycetes was first to find them in the sterile bouillon, then aseptically and with care to infect a tube of neutral gelatine. In this tube there was a mixed infection. The second contained a few other germs. The fourth tube gave a pure culture of blastomycetes. These blastomycetes stain with the usual coloring fluids. Hemotoxylin and fuchsin or eosin can be used with best results.

Many animals were infected with pieces of fresh tumors. A white rat was infected with a piece from an ovarian cancer; after 61 days the rat died of numerous tumors. The microscopical diagnosis was adenosarcoma with many blastomycetes. In the case of a Guinea pig infected with a cervical cancer, the liver was covered with epithelial tumors and contained blastomycetes. A rat injected into the testicle with a

pure culture of blastomycetes derived from an ovarian cancer, after 195 days died, filled with numerous tumors. These proved to be round and giant celled sarcomas with numerous blastomycetes.

To recapitulate, Leopold was able 1, to see blastomycetes in scrapings made from body-warm cancers and to study them; 2, to make pure culture; 3, to inject a pure culture into the testicle of a rat, that died of tumors in which were found numerous blastomycetes; 4, to make pure culture of the blastomycetes found in the tumors of the rat.

BIBLIOGRAPHY.

Cohnheim-Allgemeine Pathologie, 1882; Birch-Hirschfeld-Patol. Anatomie, 1897; Delafield and Prudden, Handbook of Pathological Anatomy and Histology, 1901; Proceedings State Society of Virginia—Past, Present and Future of Cancer; Stuart McGuire, 1901; American Medicine, November 22 and 29, 1902—The Pathology of Katabolism in Relation to the Etiology and Pathology of Cancer and Allied States, Homer Wakefield; Medical News, September 20, 1902—The Present Status of Cancer; its Etiology and Pathology—the Value of Laboratory Research, Edward N. Liell; Archiv fur Gynecologie, Band 61, Heft 1, 1900, Untersuchungen zur Aetiologie des Carcinoms und uber die pathologenen. Blastomyceten. Geheimrath Leopold; Dr. Hugo Ribbert, Lehrbuch der Pathologischen, Histologie, 1896; Dr. David Hanseman, Die microscopische Diagnose der Bosartigen Geschwulste, 1897.

See page 203 for an attractive proposition to all our subscribers. We consider it the best offer we have ever been able to make our friends.

Clinical Society of the New York Polyclinic Medical School and Hospital—Symptoms and Treatment of Calculus Anuria.*

By E. L. Keyes, Jr., M. D.

Calculous anuria may claim your attention, not because of its frequency nor because of the vague and irregular nature of its smptoms—for it is not frequent nor are its symptoms other than absolutely characteristic—but calculous anuria may claim the respect of every practicing physician because it is a condition which though grave and threatening rapidly fatal issue, shows during the greater part of its progress no signs adequate to arouse alarm in the mind of the patient or of his doctor.

It is to all appearances a perfectly benign condition. The patient walks about almost entirely well and quite free from fear of any imminent danger; when suddenly the crash comes, the disease culminates in an explosion of intense uremia. Hence most practitioners fail to realize the gravity of the patient's condition until it is too late; although the one reason why they do not make the diagnosis sooner is because they do not attach sufficient importance to it. Therefore, in calling your attention to-night to the diagnosis and treatment of calculous anuria, I might be more explicit and say that I wish to impress upon you the necessity of a timely diagnosis in order that you may be able to institute successful treatment.

Calculous anuria, as the name indicates, is a condition in which the kidneys cease to secrete urine because of calculous obstruction. In order to understand the mechanism of this, you must recognize that the kidney ceases to secrete for one of two reasons. Either

*Read before the Clinical Society of the New York Polyclinic Medical School and Hospital December 8, 1902.

its duct is obstructed or it is intensely congested. You are doubtless more or less familiar with the condition of hydronephrosis and dilatation of the kidney on account of some obstruction to the outflow of urine through the ureter. Inasmuch as stone is a fairly frequent cause of hydronephrosis, we must distinguish between the obstruction by stone which causes dilatation of the kidney and the obstruction by stone which causes anuria. The distinction is this: If the stone obstructs the ureter suddenly and completely, the kidney does not dilate, the urine which it secretes into the pelvis finds no means of escape, presses back upon the secreting structure of the organ, and causes an intense congestion, which is followed by a cessation of function, and ultimately, if the patient survives and the obstruction is not relieved, by atrophy of the organ.

On the other hand, an imperfect, gradual, or intermittent ureteral obstruction—whether by stone or by anything else—causes an increase of pressure, which is only relative and which varies in intensity from day to day, as a little urine escapes around the obstruction; and the result of this irregular back-pressure is a gradual dilitation and forcing outward of all parts of the kidney pelvis, so that finally hydronephrosis is produced.

Thus calculous anuria is caused by sudden and complete obstruction of the ureter; while hydronephrosis is caused by gradual, incomplete or intermittent obstruction.

So much for the pathological aspects as regards a single kidney. But you will agree with me as I am sure that if, for the production of calculous anuria sudden complete obstruction of both ureters were required, this condition would indeed be a rare one. But such is not the case. Post-mortem examination of the kidneys of persons dying from calculous anuria habitually discloses complete obstruction of only one ureter. But the opposite kidney is in almost every case seriously diseased. So that when the ureter of one kidney is obstructed the opposite one it not able to eliminate the necessary quota of excrementitious matter, and it too gives way—but gives way slowly—under the strain put upon it. Were this not the case, and were it possible for fatal calculous anuria to occur with the unobstructed kidney in a normal condition, every nephrectomy would be likely to be quite as serious a matter as calculous anuria; for nephrectomy, by removing one kidney, has much the same effect as has the complete obstruction of one ureter.

Legueu has recorded 30 post-mortem examinations of cases of calculous anuria, and Morris has collected 28. Legueu found the opposite kidney absent thrice; atrophied and otherwise damaged by calculus in 20 instances; while in 6 there had been previous obliteration of the opposite ureter; so that the complete obstruction was actually bilateral. In Morris' cases, the opposite kidney was absent six times, atrophied or otherwise almost entirely disorganized 20 times; and twice much enlarged, presumably by congestion. In only one of these 58 fatal cases, was the opposite kidney in anything like a normal condition, and in that case there was a slight evidence of parenchymatous nephritis. Hence, Legueu has justly inferred that calculous anuria is caused by three factors; first, a long-standing change in one of the kidneys, markedly impairing its function, or else a complete atrophy or absence; second, a recent or recently aggravated lesion of the principal kidney, this lesion being mechanical and caused by the calculus;

third, a reflex inhibitory effect upon the disorganized kidney leading to complete suppression of its imperfect functional power.

Hence we must understand that the existence of calculous anuria means that the patient has been living for some time past briefly on the functional activity of one kidney, and that the anuria is due to mechanical obstruction to that function and reflex inhibition to the action of its fellow.

Such is calculous anuria. Its symptoms are habitually classified in three stages: First, the premonitory stage; second, the tolerant stage; third, the uremic stage. In the premonitory stage there is more or less pain referred to the kidney, and this may be an index of the kidney chiefly affected. This stage last a few hours, or perhaps a few days. The patient then passes into the second stage of the disease. In this, the tolerant stage, there are no symptoms whatever, except the absence of urination. There is no pain; there is no sensation of discomfort, weakness or sickness. The patient goes about his business, eats, drinks, works, as usual, but urinates little or not at all. He may go on in this way for three or four days, or a week, passing not more than 2 or 3 ounces of urine a day; or there may be a let-up in the symptoms and a copious outflow of urine, after which the anuria may occur.

As I have already remarked, the diagnosis of calculous anuria in this stage of the disease is a matter of no great difficulty; but the complete absence of any grave symptoms is what throws the physician and his patient off the scent; and the absence of urination is regarded as a merely temporary and insignificant matter, until the third or euremic stage shows the gravity of the condition and usually determines the patient's fate.

This third stage comes on gradually, with such suggestive symptoms as hiccoughing, headaches, insomnia and nervousness, a rapid tense pulse, vomiting and subnormal temperature. These symptoms rapidly grow worse, the vomiting grows more severe, the intellect becomes dull and stuporous; the patient's mind may wander; he may have maniacal attacks; the intestines are distended and may be filled with gas, and in a few days the patient sinks and passes away.

In 20 to 28 per cent. of all cases the patient recovers from the attack, either by the passage of the stone, or by its slipping back into the kidney pelvis in such a way as to relieve the obstruction.

Such are the symptoms of what Morris has aptly termed the gravest and the most fatal of the many serious complications of urinary lithiasis.

Of the diagnosis of the disease I need speak no further. I hope I have sufficiently impressed upon you the necessity of foreseeing grave danger lurking behind the apparently superficiality of the attack while in the tolerant stage. I know of no disease that can be confused with calculous anuria, unless it be hysterical anuria. This may simulate calculous anuria quite closely, just as hysteria may simulate almost any condition. It is not possible to give any hard and fast criteria by which to distinguish the two disease; but a careful study of any case should distinguish the hysterical element if this is present.

The treatment of calculous anuria is obviously single; it is the knife. Henry Morris, who is the greatest authority on this subject, states: "So useless is medicinal and expectant treatment that

I have refused to attend consultations in cases of calculous anuria, unless I have permission before hand to operate at once if I think the case suitable." This is the only attitude to assume. The patient may insist that he is entirely well; but the well-informed practitioner cannot afford to allow himself to be deceived until it is too late, until the uremic stage has come and the patient's chances of recovery are practically lost.

Among Morris' operations, 21 were performed on or before the 5th day of the disease, with a mortality of 30 per cent. Sixteen operated on after the fifth day gave a mortality of 50 per cent.; after this a 75 per cent. mortality in cases not operated upon; until you have a series of figures which bears out very strongly the necessity of early operation.

There is one further point upon which I wish to delay: that is the choice of operation. These cases, no matter how seemingly well they may be, are in reality suffering from a grave disease; hence the operation for the relief of calculous anuria should be of the simplest possible description.

No attempt should be made to extirpate the kidney or to investigate for the presence or absence of calculous beyond inserting a finger rapidly into the pelvis. Indeed, if the calculous is large and impacted, it would seem wiser not to disturb it, even though it were readily excised. All that the patient requires is simply nephrotomy and drainage of both kidneys, and nothing else should be attempted upon him. Time is the most important element in these surgical treatments and if secondary operations are necessary on account of the haste with which the primary one is performed, it will at least be a source of gratification to the surgeon to have a surgeon upon whom to operate.

Dr. R. H. M. Dawbarn opened the discussion by saying that it was one of the notable and scholarly papers that he had ever heard. Regarding the technique of nephrectomy, he thought it wisest, as a rule, to remove the kidney from in front, though the peritoneal cavity Though not easy, this is distinctly less difficult than attacking the narrow space between the last rib and the space of the ilium, where one is very likely to tear through the peritoneum without knowing it. Again, at the back, the thick lumbar muscle allows of a very small space in which to ligate the vessels, and there is risk, in consequence, of cutting too close to them, and of causing ugly hemorrhage. If performed from the front, one has daylight and room, the surgeon's greatest helps. One can also palpate the other kidney, always an advisable procedure, and after removing the diseased kidney, can carry a drain out at the back, below the last rib, by the Hilton-Roser method, and then neatly sew up the peritoneal cut through which the kidney has been removed, thus leaving a clean and safely closed peritoneal cavity.

In this anterior operation the use of the Dieulafoy aspirator to remove fluid of whatever sort from the distended kidney is a distinctly good first step after exposing the organ. The subsequent enucleation is easier because room has been gained and is avoided of the great danger of bursting a tense, thin wall and discharging pus, urine, or broken down blood everywhere.

OBSCURE ABDOMINAL TUMOR.

Dr. Albert Kohn showed a patient with a movable growth in the abdomen, a class of cases in which so many errors are made. The woman was well up to three months ago, when she developed very slight stomach trouble. She had not vomited, but had been very

much constipated, and her stools were dark in color. For about eight years she had had more or less intestinal trouble. Between the ensiform cartillage and the umbilicus she presented a mass of extreme hardness about three inches in length, the characteristics of which were not clearly demonstrable. The growth was extremely mobile during respiration, and was easily displaced, either to the right or left. On inflating the woman's stomach, the tumor was found to be fixed, but perhaps a trifle less distinct in outline. As to the question of diagnosis. The speaker said that the woman was 49 years old. She had a tumor which undoubtedly was affecting her general condition, because she was rapidly losing weight. In both iliac fossa she had enlarged glands, which were very hard. The mobility of the mass excluded the question of involvement of the pancreas. There were no urinary symptoms, nor anything about the tumor to suggest kidney trouble. The only two organs that remained. outside of the omentum, which he excluded on account of the rarity of diseases of this type, were the transverse colon and the stomach. An examination of the stomach contents proved that the amount of acid was approximately normal. The woman had not vomited, and had absolutely no gastric symptoms. If it were a pyloric tumor it would hardly be of this shape, and one would expect gastric dilatation. The anterior stomach surface and the transverse colon were the only remaining sites. A differential diagnosis without further investigation would be impossible, but the main facts pointed to the transverse color rather than to the stomach as the site of the growth, on account of the lack of gastric symptoms. He believed, however, that on thorough examination of the secretions and excretions, and on inflation of the intestines and stomach, one could make a positive diagnosis.

RADICAL OPERATION FOR THE CURE OF VARICOSE VEINS.

Dr. J. A. Bodine showed a patient upon whom he had operated for varicose veins. He said that the operation which he had performed had, in his opinion, many advantages over both the Trendelenberg, which is employed by most surgeons, and the Shede, which was recommended by Dr. Daybarn, and which he had tried in one case, but would not employ again. The patient present illustrated the open method of removing the entire internal saphenous vein for varicosities. This method was first written up in this country by Dr. Russell Fowler, several years ago. Since the publication of this paper, the speaker had operated eight or nine times by this method. The entire vein-trunk is removed through three one-inch incisions, the first incision being made just below the internal saphenous opening, the vein being ligated and cut in two. The end of the vein to be removed is then held in the grasp of forceps, and with the fingers and knife-handle is dissected subcutaneously from the surrounding areolar tissue, all afferent veins being torn in two. The second incision is then made on the inner side of the knee, in the course of the vein, and with knife and handle and fingers a similar subcutaneous dissection is made upward, and this part of the vein withdrawn through the second incision. Dissection is then made downward under the skin toward the ankle as far as possible, the third and last incision being on the inner side of the leg just above the ankle. Through this incision the entire length of vein is withdrawn. There is no after-bleeding under the skin when the tourniquet is removed

if a tight, snug dressing is applied. The only objection to this operation is the possibility of sepsis, which can most certainly be obviated to a certain extent if the operator wears rubber gloves. Remarkable as it may seem, only one ligature is applied during the entire operation. The entire vein is removed without a single afferent vessel being tied. The vein removed from the patient was exhibited. It was a perfect specimen of extreme calcification. The large afferent branch, which was torn in two without ligation, was distinctly evident. The speaker expressed the opinion that as soon as catgut can be eliminated from these operations, so soon will all danger of sepsis be done away with, for each and every piece of catgut is a protenial in the production of sepsis.

Before operation for the removal of this vein, he had succeeded in healing an extensive ulcer of the leg, which had resisted all efforts at cure for twenty years. The method by which this was accomplished was first described by Dr. Hodgen, of St. Louis, away back in the seventies. After confining the patient in bed for a week or two and applying stimulating dressings to the granulation bed of the ulcer, it was in proper condition for operation. The soles of the patient's feet were partially sterilized by the application of a 10 per cent. boric acid ointment, after repeated washings. The epithelium was then scraped from the soles of the feet, dried in a warm sand-bath, and sifted over the bed of the ulcer twice each week, until healing was complete. It was an efficacious and ready method of skin grafting. What is remarkable is that dried, dead epithelium scraped from the soles of the feet will become vivified and will proliferate and unite upon a proper granulation bed. It would seem that the life of the epithelium cell is almost indestructible.

Our policy has always been liberal toward our subscribers, but on page 203 you can learn of something unusual, something we are pleased to offer our friends.

SELECTED PAPERS.

The Cure of Boils.

By A. K. Bond, M D., Baltimore, Md.

A solitary boil is seldom brought to the physician's attention, the public knowing that a series of poultices or application of a "drawing salve" will be sufficient treatment; the old-fashioned rosin soap and brown sugar salve (equal parts rubbed together and applied on a disc of paper) is one of the best of these. Another is made by warming over a water-bath balsam of Peru, yellow wax, of each two drachms, white turpentine half an ounce, stramonium ointment one ounce.

In specially painful locations the boil may be brought under the physician's care. It is usually when boil after boil has appeared or when a number have come at once that the physician is called in. Under these circumstances, however much one regrets to confess it, the physician often fails to control the disorder. Either the patient may lose confidence in his skill, or he may succeed in his efforts after such a long campaign against them that it becomes questionable whether the body has not really cured itself, little aided by his efforts.

In self-limited conditions the last remedy or the last doctor gets the credit of the cure, and there are therefore a host of sure cures on the one hand and a host of humiliated doctors on the other after each epidemic of furunculosis in a community. Furunculosis runs its course after some weeks, or perhaps many months, unless indeed the condition of the system, which enfeebles the skin so that it cannot resist local infection, is permanent, as in some cases of diabetes. Ordinarily, under time, tonics, and perhaps touring, under purgatives and dietary regulation, the skin recovers its tone and the outbreak of boils ceases. The value of special remedies, such as brewer's yeast and calcium sulphide is probably due largely to their alliance with the great healer—time.

Now, although the writer admits that this is a reasonable and true view of the course of furunculosis in patients who are dirty, careless and irregular in their visits to the doctor's office, he denies that it ought not to occur in the case of a careful, cleanly patient who will give the doctor a chance to bring to bear all his medical skill.

An epidemic of boils ought in such a patient to be at once brought under control and quickly brought to an end, in the manner now to be described.

THE CURE.

The first thing to do is to quarantine the existing boils so that no more pus may be carried from them by the fingers, or in any other way, to other parts of the feeble skin. To this end antiseptic dressing is necessary. The old-fashioned poultice brings probably the quickest possible healing to the individual boil, favoring the quick separation and casting off the infected or dead core; but it certainly permits and even favors infection of adjacent parts by the pus organisms smeared about; and the painfulness of bringing a large boil to a head in this manner is a matter of personal experience to most adult physicians.

No one who has had a large boil follow this course of development on his face, or the back of his neck, will ever admit that the process was in all respects ideal; and when one tender point after another has slowly evoluted a large boil, and crops of future candidates are pressing forward, meditations on the vanity of life are quite justifiable.

I have sometimes thought there must be in these cases of persistent furunculosis some rare agent at work, not the common pus germs, but some other germ gotten by contact with a previous sufferer, or caught in sleeping car, steamer berth and like places of exposure. The history of certain cases which I have known has been traced by the patient to such sources.

Practically, however, quarantining the already-suppurating boils, and the proper applications to threatening spots, will speedily check the disease, whatever the nature of the infection.

If the core of the boil is loose, it should not be allowed slowly to suppurate out. A pair of dressing forceps thrust, open, to the bottom of the boil will remove it in a moment. Cleansing of the wound-hole with peroxide of hydrogen, and dressing with calomel and bismuth, will probably secure as quick healing as in any other wound.

If the core of the boil is not loose, it is proper to deal with the core as with any other infected focus—that is, to cut it out with knife and scissors. The limits of the core will easily be determined by following the whitish masses of dead tissue downward from the center of the boil and laterally until bleeding tissues are met.

The core itself is insensitive. Where, however, bacterial foci are bound down by dense fibrous tissue, or wherever pus is shut in, the adjacent healthy tissues will be extremely sensitive. When all infected tissues have been removed from any part of the wound or completely disinfected the pain in that part ceases, and does not return unless irritating substances have again been formed in some portion of the wound.

With a narrow, sharp knife, therefore, a pair of pointed scissors that cut accurately, a forceps, and a pair of spectacles that focus at six inches, a very painful, inflamed boil in any stage of development can be so dressed as to be practically painless at the end of each dressing. The application of pure carbolic acid on an applicator in advance of the knife or scissors will usually anesthetize the wound sufficiently to permit of thorough work. Peroxide of hydrogen is a great aid to the cleansing, but takes much time. As long as any part of the wound is very sensitive the tissues there should be searched with knife of carbolic applicator. All excess of carbolic acid should be neutralized by alcohol. If all the shut-in foci of infection are reached in this way the wound will always become practically painless—not more so than any other tissue subjected to a clean surgical operation. The necessity for repeated dressings with these agents is due to the penetration of the tissues in every direction by the infected columns and the great density of the fibrous bands which are infected in large or deep boils. Comparatively superficial boil cavities may be treated with nitrate of silver (the 1 to 6 solution in water being practically painless.) If, however, the excavation is very deep, or if all the infected foci cannot be reached, the pure carbolic acid, which does not favor scabbing, is best, with a subsequent dry dressing of boric acid, calomel or other disinfectant, the cavity being kept distended with dry gauze.

Suppuration will not cease till all infected tissues have been removed. Inasmuch as pure carbolic acid favors suppuration, the last traces of necrotic fibrous tissues in the depths of a deep excavation may better be removed by dressings of pure alcohol, which does not favor suppuration. Alcohol gives very severe pain on the first touches to the wound, but then anesthetizes the parts it has touched. Fibrous sloughs seem to clear away under it more quickly than under carbolic acid. A plug of gauze soaked in alcohol may be left in the wound.

The top dressing of the wound should be of cotton, to keep the sick tissues at even warmth; the slight pressure to support the tissues is helpful.

This method of treating mature boils is not only in better accord with modern surgical teachings than the ancient poulticing and salving methods; but greatly lessens the pain and inconvenience of the ailment and hinders new infections of adjacent or distant parts; and above all, in large or deep boils or carbuncles, by destroying infected foci and securing escape for confined pus, prevents the burrowing of pus, the extension of the infection to adjacent deep tissues and the febrile sepsis of whole body system which may otherwise follow.

ABORTION OF BOILS.

In treating a patient who has crop after crop of boils it is not sufficient to quarantine the mature boils, as already described; but the development of new boils must be prevented. This is really very simple in a good patient. When the mature boil has been dressed all suspicious papules in the neighborhood

should be painted either with pure carbolic acid or with good tincture of iodine (till a mahogany color remains); and all vesicles or superficial pustules should be opened and touched with pure carbolic acid. The iodine repeatedly used will probably turn the threatening boil at the papular stage into a hard nodule, which will gradually be absorbed: and the disinfection of the opened vesicle will usually cause it to dry up.

Every morning and evening the patient or an attendant should go over the whole body and touch in this way every suspicious place. In a few days it will be evident that the spread of the furunculosis is checked. In hairy parts of the skin, such as the axilla, the plucking out of the unhealthy hairs is a great aid to the checking of the infections, and at once brings the process within reach of the agents above mentioned. The patient soon becomes accustomed to the pain of epilation, and if one hair follicle after another has developed a painful boil, considers the pain of epilation a small price to pay for relief.

If the patient is wedded to poultices, frequent baths of the whole body, abstinence from scratching, and touching with carbolic acid (which is painless) of all suspicious points will probably after a time work a cure. The smearing of the parts under and around the poultice with carbonized vaseline may be an additional safeguard. As this salve is dangerous when applied to the whole body, a sulphur ointment, one part to eight of lard or cerate, may be used instead over distant parts.

ILLUSTRATIVE CASES.

A patient about 60 years of age had a boil on labium majus, which was treated by poultices and salves, and in a week or more healed. It was followed by a carbuncle, or large boil, on the back of the neck near shoulders. This she polticed, but it became extremely painful under the poulticing, and she came under my care. With carbolic acid, cocaine mopping and scissors I cut away day by day the necrotic tissues until a hole was excavated ¾ inch deep, 1 inch wide and 1 inch long. The first cutting and dressing gave such relief that the patient gladly welcomed subsequent operations. One or two furuncular infections of the scalp and several over the shoulder blades were aborted in early suppurative career during the dressing of the larger sore. This latter, I think, might be considered a genuine carbuncle, as the infection had when I took it in hand already penetrated down through several layers of fascial tissue, and the pus and other infective materials would have spread beneath the adjacent muscles in seeking an outlet. There was no sugar in the patient's urine. Healing was somewhat tedious, but steadily progressive after the wounds were cleaned out as above described.

The surgeon is inclined to cut out a carbuncle bodily, reducing it at one sweep (so to speak) to a simple non-infected wound. This appeals to us as the most reasonable treatment, but until the public are educated up to it, the less direct cleaning out that I have suggested may be of great value in carbuncles.

In another case the patient presented for treatment five furuncles in the axilla, which had developed one after the other in spite of salves and poulticing. Disinfection, dry boric dressing, with pressure, failing to prevent tiny new furuncles about the hair roots, epilation of the whole axilla was done and healing was then easily secured without further boils at that site. Shortly afterwards a furuncle in one of the nostrils

was treated with quick success by epilation and disinfection.

One more case will suffice for illustration. A patient exhibited a forming deep boil on the cheek. This was attacked with knife, scissors and carbolic, by peroxide cleansing also. The healing was perhaps more slow than if suppuration by the old-fashioned methods had been awaited, but there was a very great saving in pain and disfigurement. The deep hole left, of the diameter of a slate pencil, was finally dressed with pure alcohol and plugged with gauze soaked in alcohol until all discharge ceased and dry dressing was sufficient. During the whole of the boil's course under these methods it was painless and a very small piece of court plaster covered it nicely—certainly an advance on the large, red, swollen suppurating area of old times. As infection is prevented by these disinfecting processes of which I have spoken, the skin on the edge of the boil remained normal in appearance throughout. One or two secondary sores on the scalp were aborted by carbolic acid or nitrate of silver (1-6) with epilation of a small zone around them.—*Louisville Journal of Med. and Surg.*

Uses and Abuses of Arsenic.

By F. C. Simpson, M. D.

Arsenic is one of our most valuble medicines, and one that is not as popular as it should be among the profession generally. Many practitioners who do not see much of skin diseases seem to have an idea that arsenic is a remedy which can be administered in almost every lesion of the skin with advantage, and fail to recognize that, as a rule, is it contra-indicated whenever the layers of the skin are inflamed, being most useful when the epiderm is dry and improperly nourished, and of very little use when the corium in inflamed. Psoriasis is a typical disease of the former class, and in its treatment arsenic is a standard remedy. As stated above, the medicine should not be prescribed during the inflammatory stage of a skin disease. When used, it should be kept up for weeks, even months. As a result of the constant employment of arsenic when it ought not to be used, we see cases where great damage is done by its too free administration. We must also remember that the drug given in large doses is capable of producing some renal irritation as well as irritation of the stomach and intestines, and that a condition of irritability of the mucous membranes of the body generally are sometimes caused by too large a dose. Dr. Hare calls our attention to the use of arsenic as a valuable appetizer in doses of a minim of Fowler's solution with ten grains of bicarmonate soda and a tablespoonful of infusion of gentian taken before meals. I have used it this way and certainly found it a very valuable tonic. It is also useful in certain forms of morning diarrhea and nausea; also it is valuable in the treatment of various forms of anemia, in which case it must be given over long periods.

It is hardly necessary to remind you that it is almost a specific in the treatment of chorea, and its value as a blood tonic in malaria, and its great value in diabetes and asthma. It is held by Murray and others that it is useful in those asthmatic cases which are young, and the old with marked emphysema. It is also valuable in cases that have nasal disorders due to hyperemia of the respiratory mucous membrane. While recognizing the value of arsenic, we must not forget that it is possible for it to produce evil influences; that it is capa-

ble, when administered too long a time in large doses, of causing pigmentation of the skin, irritation of the stomach and of the respiratory tract, and, more serious still, peripheral neuritis.

In the treatment of chorea I find it of the greatest value. You must use it in increasing doses, and this is one of the few diseases in which arsenic is so valuable that you have to give it in ascending doses, even to tolerate. I find it of the greatest value in anemia; even the obstinate and often incurable cases of pernicious anemia yield better to arsenic than to any other known remedy; it is to be given in small doses and kept up for months. In the small dose you are not so likely to produce stomach disturbances. The effect of the drug in this disease is not due to its increasing the number and quality of the red blood corpuscles, but rather to its preventing or delaying their destruction in the portal circulation. By timely use of laxatives and careful watching the dosage you may easily adjust the blood-making forces.

Dysmenorrhea, frequently noticed in women with a tendency to asthma or subject to chronic skin diseases, is often cured or benefited by arsenic.

Arsenic ranks next to quinine in treatment of malaria; for instance, chronic cases, where quinine has lost its power, are markedly benefitted by arsenic.

Neuralgic headaches and anemia of malarial origin are very amenable to the drug. Fowler first reported the remarkable efficiency of arsenic in neuralgia of the intercostal and fifth pair of nerves.

It is equally as valuable in these cases, whether the disease be due to malaria or general debility. I have frequently gotten very good results in pulmonary phthisis, especially in those cases where there is excessive expectoration and slow degenerative processes. The good effect of the arsenic is shown by the rapid improvement of their general condition, there being a lesser pulmonary secretion, a general improvement in the appetite, and increase in the body weight. It is contra-indicated in phthisis where the cough is hoarse and paroxysmal, with but scanty secretions and tendency to hemorrhage. When I want to improve the nutrition of my patients, I find it the most valuable of tonics. It was not the power of increasing red blood cells, but it stops the destruction of the cell and thereby shows its great influence on the general nutrition. I do not know of any tonic that we can expect to give us better results than arsenic when administered in the proper way. In regard to the preparation used, it is just a matter of preference. I find Fowler's solution to be the most useful in a general way, and use this preparation more than any other. I believe that failure follows so many because they do not persist in its use for a long time.—*Am. Prac. and News.*

We wish to solicit from our readers, reports of unusual or interesting cases, too brief perhaps, for a completely written paper, but suitable for recording under "Clinical Notes." Many matters of value to the profession can thus easily be recorded which otherwise will be neglected and never become available for further reference. We wish our pages to be utilized for whatever will be of benefit to the profession.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

NEWER MATERIA MEDICA.

Cod Liver Oil.

By Dr. M. Loewenthal, Brooklyn, N. Y.

For many years the medical profession has shown its approval of the value of cod liver oil for its alterative, and tonic effects. It would be a waste of time for me to go into a lengthy discourse in itemizing the many conditions in which it is indicated, but principally, cod liver oil in its plain form, or in emulsion, has the disadvantage of not being acceptable to weak stomachs, owing to its disgusting taste, and its fishy odor.

I had tried most of the preparations on the market, but unfortunately the above unpleasant characteristics of the oil have prevented its use in a good many cases in which it was indicated, and I had to resort to other inferior alteratives without the success cod liver oil would have given. About a year ago I was handed a sample of Hagee's Cordial of Cod Liver Oil Compound, with literature claiming that all the unpleasant effects of the oil were removed and that the preparation still combined the medicinal properties, and potent elements of the oil; I certainly was not convinced until I had tested the preparation, and I now must say that everything the manufacturers (Katharmon Chemical Co., St. Louis, Mo.), claimed for it was absolutely true. I now use Hagee's Cordial of Cod Liver Oil Compound, in every case where cod liver oil is indicated.

Before enumemating some cases in which I have tried this preparation, I desire to say that it should be used in those cases, where we want to increase the appetite, to favor digestion, to influence the constitution of the blood, to improve general nutrition, to hasten waste and repair of the tissues, and as a general corrective and alterative. It is especially commendable in the following diseases: Catarrhs in which a good many cases are the forerunners of phthisis, scrofula, goitre, white swelling, phthisis, the cachexia of tertiary syphilis, rickets, nervous affections as neuralgia, skin diseases, most chronic diseases, and finally it is of inestimable value in rheumatic disorders. I now go to a few cases in which I have employed Hagee's Cordial of Cod Liver Oil Compound.

Case I. October 15th.—Nellie J., age 17, family history bad, father and two brothers died of tuberculosis. Examination showed right infra-clavicular region depressed, dry rales, rough inspiration on the affected side, on left side, slight depression, breathing not quite so marked, cracked pot sound on percussion. She had night sweats, lost considerable weight, has now a hacking cough with some expectoration, sputum examined by Brooklyn Board of Health showed tubercule bacilli. She stated that she felt herself daily growing weaker. Prescribed a 50 per cent. emulsion of cod liver oil with extract of malt. Patient returned in a few days complaining that the medicine nauseated her, and although she had retained several doses, she had lost all desire for food. I now prescribed Hagee's Cordial of Cod Liver Oil Compound, with instruction to take three teaspoonfuls in a glass of milk before eating, but should there be any distress, or abhorrence for the medicine, to come to the office again. She returned in two weeks saying she felt better, was

stronger, cough not bothering her very much, appetite had improved, and the medicine did not cause her the slightest uneasiness. I instructed her to continue with the medicine and at this writing (Dec. 28th) she has gained five pounds, coughs very little, has had but one night sweat, examination of spectum shows lessened activity of bacilli. The patient now continues with the above medicine.

Case II. October 16th.—George L., age 52, was treated at one of our city dispensaries for "disease of one of his lungs" as he quotes, they had prescribed cod liver oil emulsion with hypophosphites, but he was unable to take the mixture, as it was rejected by his stomach. He had complained of a dry cough, which would irritate his throat quite painfully; he generally coughed most in the morning or arising than during the day. Expectoration examined microscopically revealed presence of tubercle bacilli. Examination physically of patient showed in right infra-clavicular region a large excavation, in the left infra-clavicular region a catarrhal condition, heart's action good, had no night sweats, was feeling very weak, no appetite, and had lost considerable weight. I ordered Hagee's Cordial of Cod Liver Oil Compound to be taken in one half ounce doses in an ounce of whiskey, before meals. He reported to me in two weeks, stating that he felt stronger, appetite was "coming on," and he had been able to keep the medicine down without any difficulty; I told him to continue, and saw him again December 25th, he says he has gained two pounds, his cough is not so bothersome, his appetite is very good, has had no night sweats, and feels in every way better. I advised him to continue with the same treatment.

Case III. October 10th.—Mrs. H., came to my office with her baby boy aged 23 months. Examination showed extreme emaciation, and softening of bones. The child was brought up from infancy on condensed milk, and for the past six months lived on the same kind of food as his parents. Diagnosis Rachitis. It at once instructed the mother to give him fresh cow's milk, and cereal foods and ordered Syr. Calc. Lactophosphate in 30 drop doses, three times daily. The child was again seen on November 13th, and showed no improvement. The mother stated, her child had lost half a pound, its weight being 16½ pounds. I ordered Hagee's Cordial of Cod Liver Oil Compound in half teaspoonful doses, to be administered in milk, three times daily, to see that the child got plenty of fresh air, and his only diet to be fresh cow's milk diluted one-third with lime water. She reported November 30th that the child was progressing nicely, he weighed 17 pounds, the cod liver oil was retained by the stomach. I advised her to continue with the same treatment, and gave her a little more liberal diet for the child, as beef juice, crackers, etc. She reported on December 24th, that the baby weighs 18½ pounds, was a bright and lively child, and was improved in every way; treatment continued.

Cases IV., V., VI., VII and VIII.—All of the above cases had recovered from la grippe, but left their general health in a condition far below normal. They had used various preparations of cod liver oil, but could not retain the medicine. Some had nausea, others indigestion, and number VII vomiting each dose. I prescribed for all five Hagee's Cordial of Cod Liver Oil Compound, with good results; none of them complaining of taste, and all of them

characterized by promptness of action, with the advantage also of being free from any depressing effect on the heart." We are pleased at this expression of faith in the efficacy, promptness and absence of untoward after-effects of this most excellent remedy. We feel that the statement applies not only to Antikamnia Tablets, but to any of the tablet specialties offered to the medical profession by the Antikamnia Chemical Company, of St. Louis, Mo. Physicians desiring samples should write to this company for them and they will be forwarded promptly particularly, if they mention *"Carolina Medical Journal."*

Gude's Pepto-Mangan the Standard.

Iron preparations spring up like mushrooms in a night. The one backed by clinical evidence in hospital practice is the old stand-by Gude's Pepto-Mangan, which is the standard of known worth and which gives positive results. —*Medical News,* New York.

Pepsin is undoubtedly one of the most valuable digestive agents of our Materia Medica, provided a good article is used. Robinson's Lime Juice and Pepsin, (see page 199, this number) we can recommend as possessing merit of high order.

The fact that the manufacturers of this palatable preparation use the purest and best pepsin, and that every lot made by them is carefully tested, before offering for sale, is a guarantee to the physician that he will certainly obtain the good results he expects from pepsin.

I find Aletris Cordial Rio to be an excellent and palatable preparation. I have used it in cases of dysmenorrhea, irritable ovary, uterine congestion, leucorrhea and endometritis, with the best of results. In a case of irritable ovary, that had resisted all treatment for four years, I prescribed Aletris Cordial, and after taking for four days, the pain was entirely relieved.—T. R. Dice, M. D., Utica, Mo.

The Dietetic and Hygienic Gazette, commenting upon the dietetic value of iron, says:

"Pathologists have given pointers as to the special condition of the iron in the system and in the circulating medium, and the newer preparations aim to imitate that condition. Most of them have a brief day of fame and then drop out of sight for the reason that they lack some element of eligibility. Few are standing the test of time and the critical ordeal of the clinicians. Foremost among these it is safe to name Gude's Pepto-Mangan. It is probably the nearest approach to a physiologic reproduction yet devised. It deserves its universal popularity, and its manufacturers do well to restrict its sale to strictly ethical channels."

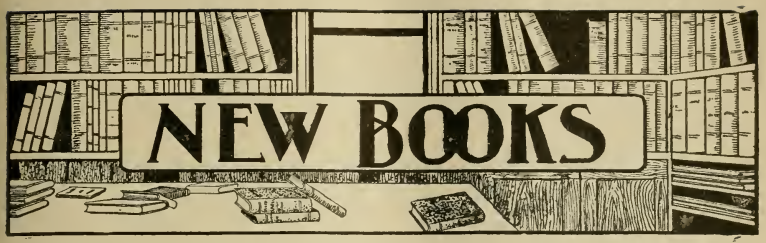
The Pill and the Bill.—

An angel's face the Doctor wears,
When first his aid is sought;
A God-like countenance he bears
Soon as the cure is wrought.

But when his little bill he makes
And seeks his humble fee,
A form most terrible he takes,
A horrid Devil he.

—*Prof. J. Stuart Nairne, Glasgow, Scotland.*

We invite the attention of all our subscribers to a proposition made on page 203 of this issue.



Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition.—By Prof. Dr. Carl Von Noorden, senior Physician to the City Hospital in Frankfort, A. M. Authorized American Edition Translated Under the Direction of Boardman Reed, M. D., Professor of Diseases of the Gastro-Intestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College, Philadelphia. Part I, Obesity. Part II, Nephritis. Published by E. B. Treat & Company.

The American edition of Clinical Treatises by Prof. Von Noorden, the first two of which we have before us, will prove interesting to physicians. The author is a writer of force and originality, a keen searcher after truth, regardless of the effects his researches may have upon theories already held by the majority of physicians. It is not too much to say that the work loses nothing in the process of translation under the directions of Prof. Reed, the American editor.

Part I treats of obesity in its various forms and complications and the views herein expressed represent the personal experiences and observations of the author. In a space of something like 60 pages, Prof. Von Noorden succeeds in thoroughly and systematically covering his subject, a capacity for concentration and conciseness that may well be admired.

Part II deals with the subject of nephritis in its acute, sub-acute and chronic form. Considerable space is devoted to the "Facts of Metabolism as a Basis for the Dietary Regulations to be Adopted in the Therapy of Kidney Disease." That the author does not always agree with the present theories regarding diet regulation in this disease is nothing to his discredit, seeing that his own ideas are based upon the most exact and scientific investigation.

We shall look forward with interest to the forthcoming treatises, to be issued at intervals of several months.

Regional Minor Surgery.—By George Gray Van Schaick, M. D. Attending Surgeon French Hospital, N. Y., etc. Bound in cloth. Heavy book paper, 226 pages. Profusely illustrated. Price $1.50. International Journal of Surgery Co., N. Y.

This work occupies a unique position. Although devoted to minor surgical techniques, the same amount of care has been bestowed upon the treatment of each individual condition that is in textbooks accorded only to subjects of major surgery. The aim throughout has been to provide the general practitioner

with a book that will afford him such practical information as he can utilize in his routine surgical work. No space has been taken up by theoretical discussions, each subject being treated in a clear and concise manner, yet omitting no detail of the least importance. While in many surgical affections a number of methods are applicable, the writer has selected only those which in an extensive experience of nearly twenty years in hospital and private practice have proved most satisfactory. The book is profusely illustrated with original sketches.

Progressive Medicine.—Fifth Annual Series. Volume I, March, 1903. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 450 pages, illustrated. Per volume, $2.50, by express prepaid. Per annum, in four cloth-bound volumes, $10.00. Lea Brothers & Co., Publishers, Philadelphia and New York.

Progressive Medicine, Volume 1, March, 1903, covers Surgery of Head, Neck and Chest, Infectious Diseases, including Acute Rheumatism, Croupous Pneumonia and Influenza, Diseases of Children, Pathology, Laryngology, Rhinology, and Otology.

Under "Skull and Brain" is a careful and clear statement of Gocher's recent studies on concussion and cerebral pressure as published in Nathanagel's Special Pathology and Therapy (Vol IX). Kocher thinks the symptom complex of cerebral compression is not accounted for clearly by either the theory of cerebral anaemia or the theory of venous stasis, and that the circulatory condition varies according to clinical stage. First stage, obstruction to venous outflow of blood. Second, intermediate stage in which pressure is so great that brain becomes intermittently anaemic. Third and final stage of continuous anaemic.

The review of recent literature on pneumonia, typhoid fever and acute rheumatism are thorough and especially interesting is the discussion of the bacillary origin of rheumatism. The entire subject matter of this volume is selected with the customary discrimination, and practical, progressive material is under every heading.

Literary Notice.—A man with a message, with a definite, clear, defined and soul consuming message, is always sure to be heard. Such a man is as different from the man who only thinks he has a message as a boy with a tin horn, who only annoys a neighborhood, differs from Gabriel blowing a blast that wakens the dead and calls the nations to judgment. That Dr. Sylvanus Stall has had such a message in his series of pure books on avoided subjects, is evinced by the fact that in their circulation they have girded the globe. Two hundred and seventy-five thousand copies have already been circulated. They are being translated into several of the languages in Europe and four in Asia. They have been welcomed in every tongue and in every land by the good and pure.

The 1903 Standard Medical Directory.—That the publication of a high-class medical directory—correct, comprehensive, attractive and influential—is appreciated by the profession is proven by the cordial reception given the 1902 edition of the *Standard Medical*

Dependable Doses

for Children.

Superior in effects to tablets.

The medicament is carefully triturated with sugar of milk and rolled into minute pills and designated

PARVULES

We note a few of the popular kinds:

Aloin, 1-10 gr.
Calomel and Ipecac, aa 1-10 gr.
Dover's Powder, ... 1-3 gr.
Nux Vomica, ... 1-50 gr.
Calomel, 1-10 gr. 1-20 gr. 1-8 gr. 1-6 gr.
Capsicum, ... 1-20 gr.
Morphin. Sul. ..... 1-50 gr.
Podophyllin, ... 1-40 gr.
Santonine, ... 1-10 gr.

and a list of others quite as valuable.

PARVULES are just as effective for adults; the plan of administration is a small dose, frequently repeated.

Samples and literature on request.

WILLIAM R. WARNER & CO.

Makers of
Standard Products for Physicians Prescribing,

PHILADELPHIA NEW YORK CHICAGO NEW ORLEANS

Directory of North America and the promising auspices attending the 1903 edition now in active preparation with the aid, so the publishers state from actual computation of nearly 25,000 correspondents representing every State, providence, county, city and town of any size in North America. The new volume will consist of about 1,300 pages comprising complete directories respectively of the physicians of all North America, colleges, societies, hospitals, sanitariums, mineral springs, publications and in fact everything related to medicine. The new features (including an alphabetical index of physicians with postoffice addresses and rosters of practitioners of the specialties) will, it is stated, add about one-third to the volume of the work.

THERAPEUTIC HINTS.

Poultices and Counter-Irritants.— Some very useful information upon this subject is contained in an article by Hanna Kindborn in the *Trained Nurse* for February. She writes at some length upon local applications for the treatment of inflammation, describing leeching, cupping, bleeding, hot and cold applications, etc. She then speaks of poultices as follows:

A hot poultice should be hot, moist, light in color and weight, applied to relieve inflammation, draw pus to surface, etc. Should never be allowed to get cold on the patient; should be put between folds of gauze or muslin, lubricate skin, test heat against your cheek, remembering that the interior is warmer than the exterior. Cover with absorbant cotton and bandage losely. Apply poultice gradually by allowing it to slip from the hand. Make poultice two inches larger all around than the inflamed area. Discontinue use of the same as soon as tissues are softened and pus evacuated.

The following poultices are mostly used: Flaxseed or linseed meal, bread, yeast, flour, Indian corn and oat meal, carrit, onion, slippery elm, charcoal, antiseptic soap, starch, spice, butter, digitalis leaves, etc.

Flaxseed meal poultice is made by stirring the meal into boiling water, allow it to boil until thick enough to cut with a knife, remove from fire, beat well, put between folds of gauze; apply.

Bread poultice is made of old bread or crackers, boiled in water until mushy; drain, beat well and quickly put between folds of gauze; apply.

Yeast poultice: Take freshly made dough, put in bag large enough to allow the dough to rise; apply while rising.

Flour poultice is made as flaxseed meal poultice, after the flour has been thoroughly mixed in cold water.

Indian corn and oat meal poultices are made as flaxseed meal poultices.

Carrot poultice: Scrape carrots fine, put between single fold of gauze; apply in cases of irritating skin diseases.

Onion poultice: Chop onions very fine, apply as above; used in cases of bronchitis and croup in children. Prevent exposure afterward, as the pores are opened.

Slippery elm poultice: Take slippery elm, soak in boiling water until soft, drain, beat, and apply. Used in skin dis-

Verge of Collapse

Colden's Liquid Beef Tonic pulls the exhausted forces together; furnishes staying and resisting power to shattered nerves and presents nutriment to perverted digestive glands in a form eagerly seized on, and transformed into rich blood; steadily brings the whole system away from the danger point—soothing, nourishing, invigorating, building. Wide use in hospital and private practice bears out the verity of each of these statements. Colden's Liquid Beef Tonic commands attention throughout Europe and America. Ext. Carnis Fl. Comp. (Colden) Beef, Brandy, Cinchona. No. 1 with, No. 2 without iron. In their most eligible and active forms.

Sold by druggists generally.

THE CHARLES N. CRITTENTON CO.
115-117 Fulton St., New York
SAMPLES FREE TO PHYSICIANS.
Sole Agents for the United States

When writing advertisers please mention this Journal.

eases when elimination is too acid in reaction.

Charcoal poultice:

Charcoal, well powdered.....dr. 4;
Bread crumbs.....oz. 2;
Boiling water.....oz. 10;
Flaxseed meal, q. s. to make a thick paste.

Sprinkle half of charcoal in poultice and half on wound. Used in gangrenous sores.

Antiseptic poultice: Use flaxseed meal and 1 per cent. antiseptic solution in place of water. For gangrenous and otherwise infected wound.

Soap poultice: Used in preparing surface of skin for surgical operations. Either made with solution of green soap in which gauze is soaked and wrung out from, or green soap paste, thinly spread on gauze.

Starch poultice, made like mucilage of starch, only thicker; applied cold in cases of irritating skin diseases.

Butter poultice: Used in cases of colic in children. Melt butter, soak flannel, and apply hot to abdomen.

Digitalis poultice: Used in retention of urine. Make a flaxseed meal poultice, sprinkle powdered digitalis leaves either over the surface of poultice or stir it in with the same.

Jacket poultice: Make an ordinary double jacket of flannel, open at shoulder, sides, and front; fasten with tapes. Slip poultice between. Or quilt gauze and cotton batting, and use as a protector in pneumonia cases.

Spice poultices are made with all kinds of spices; put in a bag, soak in brandy, and apply as a counter-irritant.

NECROLOGY.

Dr. Theodore Gaillard Thomas, of New York, died suddenly of cardiac disease, on February 28, at Thomasville, Ga., where he had gone for the enjoyment of the out-of-door life, rather than from any failure of his usual vigorous health. Dr. Thomas was born on Edisto Island, near Charleston, S. C., November 21, 1831. His father was the Rev. Edward Thomas, a lineal descendant of the Rev. Samuel Thomas, who in 1700 was sent to South Carolina by the Church of England. His mother was Jane Marshall Gaillard, who traced her ancestry back to Theodore Gaillard, a Huguenot refugee, who went to South Carolina on the revocation of the Edict of Nantes. He was graduated from the Medical College of Charleston in 1852, and, after pursuing his professional studies for some time abroad, settled in New York. After a service as resident physician in the Bellevue and Ward's Island hospitals he became associated in practice with the late Dr. John T. Metcalfe, whom he always regarded with veneration and loving esteem, and after whom he named his oldest son. From his first entrance into the profession Dr. Thomas showed himself a young man of exceptional abilities and promise, and his clinics and diagnosis classes at Bellevue Hospital soon attracted a large and eager following of students. At the same time he was eminently successful as a general practitioner.

He gradually devoted his attention more particularly to obstetrical work, and when he received the appointment of professor of obstetrics and diseases of women and children at the College of Physicians and Surgeons, at once took the first rank as a teacher and con-

Vapo-Cresolene

Cures while they sleep.

Whooping Cough, Croup, Asthma, Coughs, Colds, Catarrh, Bronchitis, Grippe.

An antiseptic, antispasmodic and prophylactic, to be vaporized for the treatment of **Whooping Cough, Croup, Bronchitis, Asthma, Diphtheria**, and kindred diseases of the throat and air passages.

It takes time to prove the value of a remedy: CRESOLENE has over twenty years behind it and the assurance of a vigorous and growing demand, besides the personal acknowledgment of many physicians, that it is the best remedy, particularly for **Whooping Cough** and **Croup** ever introduced. The application of CRESOLENE is simplicity itself. The Vaporizer acts from five to six hours without attention. The patient breathes the medicated air of the room. The treatment being by inhalation does away with the necessity of waking the patient, which, in itself, is of sufficient importance to warrant giving it a trial. **CRESOLENE may be used in connection with any other treatment,** and is used with success in the treatment of **Diphtheria, Scarlet Fever** and **Measles.** When used for the two former diseases and Membraneous Croup a tent should be built around the bed. CRESOLENE is a product of coal tar, of much greater antiseptic power than carbolic acid. Send for descriptive booklet, containing physicians' testimonials and price list.

NOTICE.—Physicians will be allowed a liberal discount, express paid on first order, and money back if not satisfied.

THE VAPO-CRESOLENE CO., 180 Fulton St., New York.

sultant. Later he paid special attention to gynecology and abdominal surgery, giving up the chair of obstetrics at the college, but retaining that of diseases of women. As a clear and impressive clinical lecturer he had scarcely an equal, and his clinics, the most popular in any of the departments, were always more than crowded by an enthusiastic gathering of listeners, among whom were many practitioners, as well as students. As an operator he won no less distinction, and at the Woman's Hospital, founded by Marion Sims, where he was one of the attending surgeons, his brilliant work attracted world-wide attention. While still retaining his appointment at the Woman's Hospital he established a private hospital of his own, to which patients came for treatment from all parts of the country.

As a writer Dr. Thomas was no less eminent than as a teacher, operator and

Keeley Cure

For Drunkenness and Drug Using.

Please write us. Correspondence confidential.

Our Illustrated Handbook Sent Free On Request.

THE KEELEY INSTITUTE, Dept. B, Greensboro, N.C.

NEURILLA

NERVE CALMATIVE

NERVE HEALTH follows its use.

DOSE: Teaspoonful every half hour until nervousness is abated, then four times a day. Teething Children 10 to 20 drops.

DAD CHEMICAL COMPANY, NEW YORK.

consultant. He was continually contributing to medical societies and journals the rich fruits of his wide experience and mechanical ingenuity, while his systematic treatise on the diseases of women was at once recognized as a classic, and became the most popular work of its kind ever published in America or perhaps in the world. It ran through many successive additions, and was translated into a dozen languages, including Chinese. In the more recent editions he had as a collaborator the late Dr. Paul F. Munde. A series of six lectures on "Abortion and its Treatment, from the Standpoint of Practical Experience," which he delivered at the College of Physicians and Surgeons after he became professor emeritus, and which was published by the Appletons, also had a wide vogue. Mention should also be made of his gifts as a public speaker. His voice was one of great richness and considerable power, and whenever he spoke in medical societies, or on the rare occasions when he made a public address, what he had to say was always expressed in the most carefully chosen and admirable English. The profession and the scientific world in general were always delighted to do him honor. Among the positions which he had held were the presidencies of the New York Obstetrical Society and the American Gynecological Society, and he received many honors from medical bodies all over the world. One of his most excellent characteristics was the willingness with which he was ever ready to extend substantial aid and encouragement to the younger members of the medical fraternity. Probably if at any time during the last few years a vote had been taken among physicians as to who was the most eminent and thoroughly representative man in the profession in New York, it would have been almost unanimously in favor of Dr. Thomas. One of the most notable occasions of the kind ever seen in the city was the great banquet tendered him in honor of his seventieth birthday, in November, 1901, when tributes were paid to him by Dr. James W. McLane, president of the College of Physicians and Surgeons; the Rev. Dr. Greer, rector of St. Bartholomew's Church; Judge Henry E. Howland, Dr. S. Weir Mitchell, of Philadelphia, and Dr. George B. Shattuck, of Boston.

With Dr. Thomas the love of the horse amounted to a passion, and he always drove and rode the finest animals. He was an enthusiastic equestrian, and attributed his fine health largely to his daily rides, which, when the weather forbade outdoor exercise, he took at the New York Riding Club, of which he was one of the originators and most prominent members. He was ever the courtly Southern gentleman, and his geniality and grace of manner rendered the noble traits of his character all the more attractive. No sketch of him would be complete without a reference to his summer life at Southampton, Long Island, where for many years, except when occasionally he went to Europe, he was accustomed to spend his vacation months. While there he threw off the cares of professional work, absolutely refusing all consultations, except it might be in some case of life and death, and enjoying to the full the delights of country life. With the members of his family or some guest he would gallop for miles over the wind-swept Shinnecock Hills in the morning, and in the afternoon take long drives. He was, in fact, the father of the summer colony at that charming seaside resort, and in its more primitive days built there a substantial cottage sur-

rounded with double verandas, in the Southern style, the genial hospitality of which was celebrated in a novel, "Happy-go-lucky Hall," by the author of "Routledge." There he also took a warm interest in the affairs of the community, and was universally respected and beloved by the native inhabitants of the village, which is one of the oldest in the State.

At the time of his death he was professor emeritus of obstetrics and gynecology at the College of Physicians and Surgeons, consulting surgeon to the Woman's and French hospitals and consulting physician to the Nursery and Child's Hospital, the New York Infirmary for Women and Children, the New York Lying-in Hospital, and the New York Skin and Cancer Hospital. In 1899 he was one of the founders and incorporators of the Medical Association of the Greater City of New York. Dr. Thomas leaves a wife and two sons, the younger of whom, Theodore Gaillard Thomas, Jr., is a student at Harvard.

The Rontgen Treatment of Malignant Disease.—Charles Lester Leonard says that the best method of treatment seems to be the combination of early radical surgical operation and the Rotgen treatment. The curative power of the Rontgen treatment is not uniform. Its action appears to be both stimulant and alterative. The dosage or amount of the agent best adapted to different varieties of tumors has not been determined. This agent has an alterative and destructive action upon malignant tissue, producing retrograde changes that vary in their degree and intensity. When the dosage shall be determined, this agent will undoubtedly prove to be one of the most potent. As a primary method of treatment it has no place, except when operation is contraindicated or when more cosmetic results can be produced, in cases which life is not threatened by delay or in which the disease is already inoperable. This agent must be employed with great care.—*Med. Record.*

DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

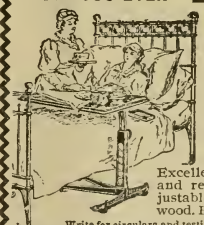
Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

JOHN R. IRWIN, M. D.,

CHARLOTTE, N. C.

Special Attention Given Surgery and Gynecology.

DID YOU EVER **ENJOY A MEAL IN BED?**



Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
CLEVELAND, O.

LIQUID FEBRISOL

(TILDEN)

DOCTOR: Read this formula, then send for sample and literature. After a trial you will be convinced that Febrisol is the best anti-pain and febrifuge ever offered the medical profession. It is as reliable as morphine; has none of the bad after effects, and is opposed to cardiac depression.

Formula: Each fluid drachm contains chemically pure

Phenacetine	1 gr.
Salol	½ gr.
Cit. Caffeine	½ gr.
Acetanilid	1¼ gr.
Tartaric Acid	¼ gr.
Soda Bicarb.	1½ gr.

Prepared expressly for Physicians' Prescriptions.

THE TILDEN COMPANY,

PHARMACEUTICAL CHEMISTS,

New Lebanon, N. Y. St. Louis, Mo.

REVIEW OF MEDICAL AND SURGICAL PROGRESS.

Abstracts.—Glycosuric Symptom of Disease and its Medicinal Treatment. Henrich Stern in Jour. Am. Med. Asso'n.

Presence of grape sugar in urine is not a positive indication of diabetes mellitus, for it may occur in traumatic and other neuroses, in alcoholism, Grave's disease, in gastro-intestinal and hepatic disorders, after injury or removal of certain organs, after administration of mercuric bichlorid, chloral, morphine, strychnin, amyl nitrate, thyroid preparations; after excess in use of tobacco; during syphrilitic processes and in course of infectious disease. Non-diabetic glycosuria generally is the result of mild intoxication and may attain chronicity by persistence of course; chronicity is a chief mark of diabetic glycosuria; diabetes precedes excretion of sugar and may continue when mellituria has ceased. Non-diabetic form is amenable to treatment by removal of cause; pathology of true form is little known, hence treatment is empirical. Diet partially or completely free from carbohydrates will reduce percentage of sugar much more markedly in true diabetes than in non-diabetic glycosuria. Glycosuria is but a consequence of and not diabetes itself. Shall we treat it? No. Cases of diabetes with usual symptoms and whose urine is free from acetone diacetic and oxybulyric acids should be only dieted (no medicine) until symptoms subside or until sugar falls to 1 per cent. All cases (1) which decline on non-carbohydrate diet, (2) all cases in which long continued rigid diet does cause cessation of sugar, (3) all cases excreting less than 1 per cent of sugar

and which patient suffers from some disorder, but does not show usual comptom complex of diabetes, (4) cases in which diet relieves ordinary symptoms, but in which mental excitement causes return of glycosuria should have medical treatment alone. Use diet and medicine in cases complicated with other diseases as chronic nephritis in which it is not wise to continue diet very long. Saccharin interferes with copper-bismuth reduction and hence this test should not be employed in cases taking this substance. Pancreatic glycosuria is little influenced by drugs; alkalies may impede its progress; ingestion of large amounts of alkaline water dilutes urine and lowers percentage of sugar, but total amount of glucose remains the same. In case of pancreatic diabetes, complicated with nephritis and hchylia gastrica, Sterr reduced glucose from 100 grm. per diem to 10 to 15 by giving pacreatin grs. 30, trypsin and foliae myrtilli pulv. aa. grs. xv ft. chart 50. One powder tid. This case was on milk diet, hence medicine reduced sugar. I treated it 2 years and from being hopeless is now able to attend to business; in other cases this combination failed. Hepatic glycosuria in which interferes with normal utilization by liver of carbohydrates can be controlled for a long while by diet and after this get most good from alkalies and arsenical preparations long continued. When coma threatens or has supervened 2 to 6 grams of precipitated calcium carbonate, by enteroclysis, every 2 to 4 hours, has proved serviceable. Sodium chloride mineral water assists in hepatogenous glycosuria. Chronic affections of the gastro-intestinal tract often are causative of gylcosuria; case of hyperchlorhydria is cited in which sugar disappeared when acidity was controlled. If glycosuric case has gastric or intestinal

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to
diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:

8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

disorder, always treat this first, especially when glucose percentage falls under 1 per cent. and diabetic signs are not dominant. Phloridzin glycosuria, the co-existence chronic, diffuse nephritis and glycosuria and in which nephritis antedated sugar in urine, points perhaps to renal origin of glycosuria. Sugar arising from a gouty basis will yield to ordinary treatment for gout. Glycosuria in connection with syphilitic processes disappears under iodides and mercury. In neurogenous glycosuria give both medicinal and diabetic treatment. In these cases give opium only when there is very rapid emaciation in order to retard excessive cell metabolism. Opium exercises an influence which you do not get from its alkaloids and derivatives. Fambu is beyond doubt the best agent in this type of glycosuria; begin 10 drops and increase to 60 to 90. That sweet potatoes increase sugar less than bread was a point drawn out in the discussion of this subject after Sterr's paper.

MEDICAL NEWS AND ITEMS.

North Carolina Medical Society.— The fiftieth regular annual meeting of the North Carolina Medical Society will be held at Hot Springs, N. C., beginning Tuesday, June 2, 1903, under the presidency of Dr. A. W. Knox, of Raleigh. The leader of debate, Dr. A. S. Pendleton, of Warrenton, announces the following subject for the annual debate: "Croupous Pneumonia, and he especially desires that each member of the Society come prepared to take part in the discussion and contribute something to our knowledge of the subject. Quite a number of the State's prominent physicians will read papers this year, and the indications point to another record-breaking attendance, such as we had at Wilmington last year. The beauty of the mountains at this time of the year and the splendid equipment of the Mountain Park Hotel, which will be Society headquarters, will render the trip an unusually attractive one, and we suggest to the hard-worked North Carolina doctor that he is entitled to a vacation and that this will be the favored time to take it. The customary reduced rates will be given by the railroads and hotels. The following gentlemen are chairmen of sections: Practice, Dr. P. J. Macon, Warrenton; Medical Jurisprudence and State Medicine, Dr. Ben. K. Hays, Oxford; Anatomy and surgery, Dr. J. M. Flippen, Salisbury, Railway Surgery, Dr. P. J. Thomas, Wilmington; Materia Medica and Therapy, Dr. S. E. Koonce, Pollocksville; Obstetrics, Dr. H. McK. Tupcker, Raleigh; Gynaecology, Dr. J. F. Highsmith, Fayetteville; Chemistry and Physiology, Dr. Frank Holmes, Clinton; Pathology and Microscopy, Dr. J. H. Manning, Chapel Hill. Gentlemen contemplating reading papers before the Society should send title of paper to the secretary, Dr. J. Howell Way, Waynesville, as early as practicable.

State Board of Medical Examiners.— The forty-first annual session of the State Board of Medical Examiners will also be held at Hot Springs, beginning on Wednesday before the meeting of the State Society, May 27th. Applicants for examination should endeavor

THE PRESBYTERIAN HOSPITAL

Will Receive all Classes

Of Medical and Surgical Cases,

(Except Contagious.)

A Full Corps of PHYSICIANS

and SURGEONS in Attendance.

Address,

PRESBYTERIAN HOSPITAL,

Charlotte, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain Cactina, the active proximate principle of Cereus Grandiflora.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for
INDIGESTION

A palatable preparation of Panax Schinseng in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

to be present the opening day and bring their diplomas in medicine and evidences of good moral character and professional fitness attested by two members of the profession in this State.

Post Graduate Medical Course.—At the Presbyterian Hospital, Charlotte, N. C., conducted by the faculty of the North Carolina Medical College. Begins Monday, April 20th, and continues four weeks.

The course will innclude clinical lectures on medicine, pedriatics, surgery, obstetrics, gynecology, diseases of eye, ear, nose and throat, rectal and genito-urinary diseases. A valuable course for practitioners who wish to do some review work or study a specialty.

A systematic quiz will also be held every afternoon, covering the elementary branches and especially designed for preparing applicants for State Board examinations in May.

Physicians will find this an excellent

opportunity for bringing chronic cases with them to the hospital for thorough investigation and treatment.

Patients used for clinical study will receive every consideration and there will be no charges except a moderate hospital fee for board. Special arrangements may be made for those who cannot pay for board.

Fee for either clinics or quiz....$15.00
Both courses 25.00

Address I. W. Faison, M. D., Dean, Charlotte, N. C.; or J. P. Munroe, M. D., President, Davidson, N. C.

Commencement Speakers at Elizabeth College.—The most successful school year in the history of Elizabeth College for Women, at Charlotte, N. C., is drawing to a close. The commencement takes place May 31st and June 1st and 2nd. There are twelve young ladies in the senior class this year. The Rev. W. H. Greever, of Columbia, S. C., will preach the baccalaureate sermon on Sunday, May 31st; on the evening of the same day Rev. J. A. B. Shearer, of Charleston, S. C., will deliver an address to the Y. W. C. A. Rev. T. F. Marr, of Charlotte, N. C., will make the commencement address on the evening of June 2d in the college auditorium. Alumnae meeting on the morning of the 1st; art reception afternoon of 1st; annual concert evening of the 1st; senior class day exercises Tuesday morning, the 2d; and commencement exercises, awarding of diplomas, etc., and address by Dr. Marr Tuesday evening.

Effort to Check Venereal Diseases.—At the last (fifty-third) meeting of the American Medical Association, held at Saratoga Springs June 10-13, 1902, a joint resolution from the sections of Cutaneous Medicine and Surgery and Hygiene and Sanitary Science was introduced in the House of Delegates as follows: "Whereas, There is a burning necessity to check the spread of venereal diseases and, assuming that the State cannot with impunity ignore the condition, it lies in the province of the medical profession to discuss and recommend to the respective State Legislatures and Municipalities means not regulamentative, but social, economic, educative and sanitary in their character, to diminish the danger from venereal diseases. *Resolved,* That the Section on Cutaneous Medicine and Surgery of the American Medical Association invite the section on Hygiene and Sanitary Science to co-operate with the section on Cutaneous Medicine and Surgery in bringing about a propaganda in the different States looking toward a proper recognition of the dangers from venereal diseases, and to arrange for a national meeting under the auspices of the American Medical Association for the prophylaxis of veneral diseases, similar to the International Conference for the Prophylaxis of Venereal Diseases, which meets again this year at Brussels, under the authority of the Belgian government." This was later submitted to the House of Delegates, which endorsed the action of section and adopted the following: *"Resolved,* That a joint committee of six from the Sections on Hygiene and Sanitary Science and Cutaneous Medicine and Surgery be appointed by the president to stimulate study in and uniform knowledge of the subject of the prophylaxis of venereal diseases and to present to the American Medical Association a plan for a national meeting, similar to the International Conference for the Prophylaxis of Venereal Diseases, which meets again this year in Brussels, under the auspices of the Government of Belgium." The Committee on Prophylaxis of Venereal Diseases consists of: Dr. D. Holton, chairman, Battleboro, Vt.;

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these Preparations.

A

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

℞ Each fluidounce contains:

Hypophosphites Soda	2 gr.
" Lime.....	1½ gr.
" Iron.....	1½ gr.
" Quinine.....	¾ gr.
" Manganese ..	1½ gr.
" Strychnine..	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate Sodium	....12 grains
" Potassium	..... 4 "
" Calcium.....	4 "
" Iron	2 "

FREE Monohydrated Phosphoric Acid 16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE.—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

C

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence of a sedentery life, coupled with nervous and mental stal strain.

Reliable Pepsin is one of the best Digestive agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating. Children, one-half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromatic menstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable.

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50

N. B.—We also make 25 per cent. strength.
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

Saloform, in Powder, per ounce	$1 25
Saloform, 5-grain Tablets, per 100	1 25
Saloform Elixir, pints	2 00
Solution Albuminate of Iron, Syrup Albuminate of Iron Comp., pints	1 00
Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

Please specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

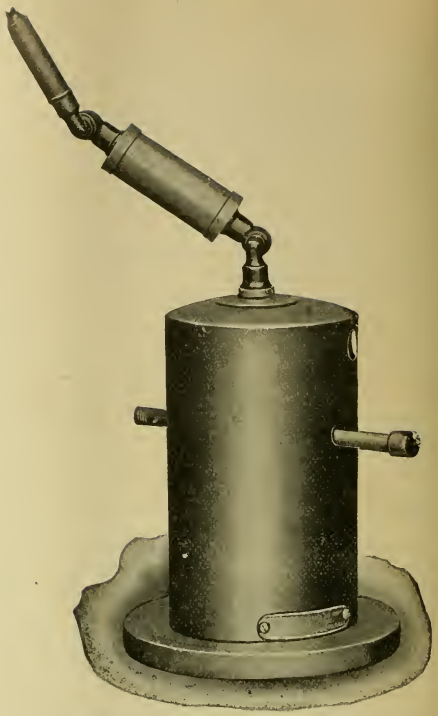
Founded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

The Hopkins Compressed Air Heaters

Electric Gas Alcohol

The Perfect Instrument for treatment of the ear with superheated air. Practically indestructible. Patented in all features. All kinds of special electric heaters for medical work. Write for booklet.

THE TERRY HEATER CO.,
Cleveland, Ohio.



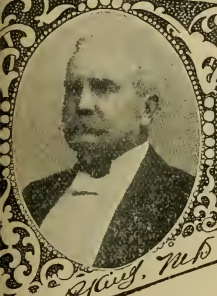
Dr. Ludwig Weiss, secretary, 77 East 91st St., New York; Dr. George M. Kober, 1600 T St., Washington, D. C.; Dr. W. H. Sanders, Montgomery, Ala.; Dr. Duncan Bulkley, 531 Madison Ave., New York City; Dr. Frank H. Montgomery, 100 State St., Chicago, Ill. The peculiar social, racial and political conditions of our country are so different from those on the Continent that they necessitate an expression of solely American ideas on this mooted question, both from a socia-economic and sanitary point of view. The committee desires the support of the medical profession and the aid and powerful collaboration of the medical press of the country to help them in this work. It takes the liberty of soliciting expressions and views editorially and otherwise, and would be glad of personal correspondence from those supporting the movement and who will contribute by papers, etc., to make it a success in case the House of Delegates should favor the holding of such a congress.

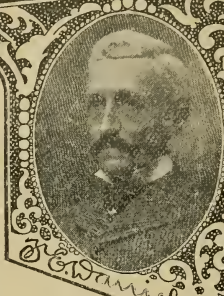
Lectures and Laboratory Courses for Post-Graduates.—The University College of Medicine, Richmond, Va., desires to announce that, commencing on March 23d, and continuing until April 23d of this year, a series of lectures, together with special laboratory and clinical work, will be given to post-graduates by the members of the medical faculty. It is not intended that this work shall be as comprehensive as a full post-graduate course would allow, but it is

SOMETHING FOR LEISURE HOURS

STORIES OF A COUNTRY DOCTOR

RECOLLECTIONS OF A REBEL SURGEON





ALL WORK AND NO PLAY MAKES JACK A DULL BOY

Here are two books chock full of wit, fun and pathos, that should be on every doctor's table. Their titles tell the story. They speak for themselves. Each $1, post-paid

The Clinic Publishing Company, - Ravenswood Station, Chicago.

hoped that it may prove helpful to practitioners as a critical review of the latest developments in medicine and surgery, reinforced by laboratory tests and clinical demonstration. The methods pursued will be practical and conferential, and among the subjects discussed will be the following: 1. Indications for. and practical application of the different forms of electricity. 2. Indications for. and practical application of X-ray in disease. 3. Course in Clinical Diagnosis (with microscope) embracing: (a) A practical course in the examination of diphtheretic cultures, sputum malarial blood, urine, etc. (b) A brief course in haematology. (c) Examination of stomach contents. etc. 4. A study of some of the accidents and complications of labor cases, and a review of the most approved forms of treatment of Puerperal Eclampsia, Placenta Previa, etc. 5. Latest developments in Medicine and Surgery. In addition to the above named subjects, those taking this course will be entitled to attend the medical and surgical clinics in the regular college course from March 15th to April 15th, 1903, without additional cost. The fee for this course, or any part of it, will be $10.00. Special information regarding the schedule, etc., may be obtained by addressing the Proctor, University College of Medicine, Richmond, Va.

Dr. D. C. Parris, Hillsboro, N. C., wishes to purchase a good microscope, a blood counting apparatus, a centrifuge and a few other minor laboratory fixtures. If any of our readers have any of these articles and desire to dispose of them, write the doctor.

An epidemic of typhoid fever has made its appearance in Ithaca, and has attacked a great many of the students of Cornell University located there.

The United States quarantine office at Manila has reported that port free from cholera.

The plague in Mazatlan is still raging, several deaths from the disease being recorded daily.

The title of Doctor Medicine was conferred first on Guiliebmus Gordinio by the College of Aosta, in 1220.

A society has been organized in Munich for the purpose of the prevention of the spread of venereal diseases.

The sum of $50,000 has been given by Mr. T. S. Timms for the systematic investigation of the origin and cure of cancer.

The authorities of the Carnegie Institute have just awarded five grants to the Johns Hopkins University for research work.

Seven medical school inspectors of the New York Board of Health were recently dismissed for falsifying their vaccination reports.

Rockefeller has recently enlarged the scope of the Rockefeller Institute and New York has been chosen as the permanent headquarters.

A Typhoid Fever Serum.—Dr. Allan Macfadyean, of the Jenner Institute of Preventive Medicine, claims to have elaborated an efficient propylactic and curative serum for typhoid fever. It is prepared by injecting into animals a product obtained by crushing typhoid bacilli in liquid air. The intense cold of liquid aid does not destroy the toxin, but renders the bacilli so exceedingly brittle that is is comparatively easy to break them up by saturation. The serum obtained by repeated injections of these crushed bacilli is both antitoxic and bacteriolytic and is curative as well as protective.

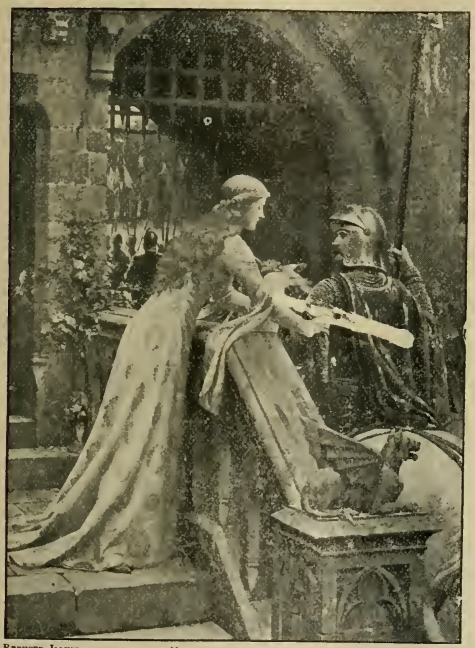
Dr. Marmorek, of the Paris Pasteur Institute, is said to have succeeded in elaborating a tuberculosis serum of the efficiency of which he has satisfied himself. A report will soon be made by him to the Paris Academy of Science. Nine months is said to have elapsed since Marmorek obtained his serum, but he has kept back his results for confirmatory investigations. It is to be hopel that he will be allowed to bring the matter forward in his own way and time, so that some rational scientific opinion of its value may be had before it is damaged by hysterical press heralding. —*New York Medical Journal.*

The Board of Health intends to proceed against 315 druggists of the boroughs of Manhattan and Brooklyn who, the inspectors have discovered, are in the habit of selling adulterated phenacetine. It was discovered a short time ago that a phenacetine powder bought in a drug store was adulterated, and from this arose the suspicion that other druggists might be doing the same thing. Therefore a force of inspectors was sent out to visit drug stores in the two boroughs. Of 373 samples obtained, 315 of the powders were found to be impure. In some cases the powders contained no phenacetine at all.—*Med. Age.*

A bill has been introduced into the Pennsylvania Legislature which provides, according to *American Medicine,* that any and all proprietary or patent medicines prepared, sold, or offered for sale in Pennsylvania shall contain upon the label a true and correct copy of the formula, ingredients or constituents of the same, together with a true and correct printed statement in English of the several and respective quantities or proportions thereof. No person shall be employed or engaged in the manufacture and the mixture, compounding, or preparation of any proprietary or patent medicine who is not a regular graduate in pharmacy and so registered under the

An Elegant Reproduction of a Charming - - - - $15,000 Painting GIVEN AWAY

We have been fortunate in making arrangements with the publishers of the WOMAN'S HOME COMPANION, so that we are able to give our subscribers a chance to accept the biggest offer ever made by any publishing house. The picture that we offer here is by E. Blair Leighton, R A., a most celebrated artist. When exhibited for the first time it was quickly bought up at the enormous price of $15,000, and hung in a famous gallery, where it is admired by thousands and thousands.



REDUCED ILLUSTRATION "GOD SPEED" FULL SIZE 22 BY 28 INCHES

Woman's Home Companion

This magazine is edited and made up in the city of New York, the leading literary and art center of America. It is printed on the finest paper, has 44 to 60 large pages, 11 by 16 inches. It contains the Best Short Stories, Fashions, Children's Pages, Prize Contests Monthly, Nature-Study Club, Embroidery, Physical Culture, Talks With Girls, Nurse Norah's Fairy Tales, the Most Popular Serial Stories, Handy Tool Series for Boys, Sam Loyd's Puzzles, Science and Invention, Social Studies, the Dining-Table, the Kitchen, Twelve Stirring Historical Events Pictured by Celebrated Artists. The twelve numbers will contain more than one thousand beautiful illustrations. Its 400,000 copies every month carry messages of help, profit, pleasure, education, culture and refinement to over two million readers. Its writers and artists are the most famous in America. It is altogether the cleanest, brightest, handsomest, choicest and best of American home magazines published at $1.00 a year.

A Total of Over $700 for only $1.85

"God Speed," very, very cheap at - - - - $5 00
Woman's Home Companion, one year, price - 1 00
Carolina Medical Journal, one year, price - - 1 00

Both Papers One Year and this Picture sent to any address for only - - - **$1.85**

In this offer, although paying less than the ordinary and regular price of the papers for a year, you get in addition the above described charming picture entirely free. The papers and picture in the above offer can go to different addresses. The above offer applies to old and new subscribers. Send all orders to this office.

CAROLINA MEDICAL JOURNAL, CHARLOTTE, N. C.

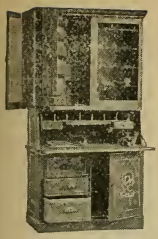
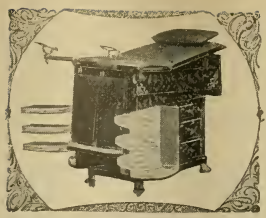
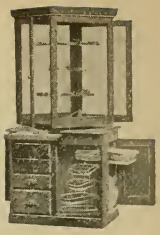
laws of the State. Persons violating this act are liable to a fine of $1,000 or imprisonment for one year, or both, one-half the fine to go to the person furnishing the information.

New Serum for Tuberculosis.—Prof. Behring claims to have obtained a protective serum against tuberculosis by his method of jennerization. This consists in injecting cattle with cultures of human tubercle bacilli, which are little if at all pathogenic for the animals, but whose toxin acts like toxoid in stimulating the production of antibodies. He has found that the serum so obtained is efficacious in conferring absolute immunity against infection with bovine tubercle bacilli in cattle, and believes that a like immunity can be produced in the human species. He even claims that the serum is curative in the case of young children, though it would probably not be in adults.

The Alleged Cholera Infantum Germ.—The reputed discovery by Dr. Simon Flexner of the specific micro-organism of cholera infantum has, as was to be expected, set the newspapers agog, and a number of well known medical men have been interviewed concerning it. It is refreshing to find among the responses such a sober and well considered statement as the following, by Dr. Henry D. Chapin, published in the New York *Herald* for March 16th: "As far as I know, the germ of cholera infantum has never been discovered. It is quite possible that several germs may be responsible for it. The true cholera infantum is rather rare in this latitude. A remedy will have to be tried in a very large series of cases and through different years before it can be thoroughly accepted, as the mortality of such diseases varies a great deal from year to year under practically the same treatment. These studies are hopeful and should be encouraged, but premature conclusions should not be drawn."—*N. Y. Med. Jour.*

At New Orleans in May.—The annual session of the American Association will be held in New Orleans, May 5-8. Recently a meeting of the Committee of Arrangements was held at New Orleans, which was attended by the president and secretary of the association. An announcement was made of a granting of a one-fare round-trip rate by the Southeastern Passenger Association. If deposited with the special agent at New Orleans not later than May 12, tickets can be extended to May 30th. Excursions from New Orleans to Cuba and a circular trip by way of Washington and New York are being discussed. A New Orleans number of the *Journal of the American Medical Association* will be published four weeks before the meeting and 35,000 copies issued. With the unusual railroad rate of one fare for the round trip, a delightful season for a visit to New Orleans, and an assured attractive programme, a large attendance should be assured.

Sanitation in San Francisco.—The Chinese Six Companies have caused to be printed both in Chinese and English notices giving the street and room number, the height, width and length of the room, its cubical contents and the number of persons allowed to occupy the space under the health ordinance, and under each of these notices is printed a warning to the effect that "all occupants must see that rooms and buildings are kept clean and in good sanitary condition." These notices were posted on the door of every living room in San Francisco, and it is asserted that the influential Chinese merchants are doing everything in their power to aid in the effort to bring about better sanitary conditions. The Six Companies have also

A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your patients. Therefore, in the selection of your equipment you should exercise great care. The testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

Are the best and are adapted to all lines of regular and special practice. They are superior in workmanship and design, and include more conveniences than any other line on the market. (Catalogue "A" fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

A Sanatorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

Beautifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

MAPLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

---

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &C.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents.

Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

notified the United States Public Health and Marine Hospital Service that they will co-operate with the service in every possible manner, and asking for instructions. In view of the absolute authority exercised by the Six Companies over the Chinese inhabitants this turn of affairs warrants a hope that the quarter will be thoroughly policed.

MISCELLANEOUS.

Eye-Strain and Epilepsy—Drs. *Gould* and Bennett, in a preliminary report (*American Medicine,* Sep. 13, 1902) call attention to the large percentage of epileptics who suffer from morbid optical conditions. Of seventy-one epileptics examined—the majority being young or middle-aged adults, all sane and able to read, but otherwise unselected—only three had optically normal eyes. Of the remaining sixty-eight, sixty-seven had astigmatism, and of these thirty-three had asymmetrical astigmation, a defect which, according to the authors, produces the most injurious results upon the cerebral functions. Only nine out of seventy-one patients were isometropic.

Without drawing deductions, the authors maintain that the use of the eyes at near work, with uncorrected asymmatrical or other astigmatism and anisometropia, may well be shown to share in the causation of epilepsy, as also of many other neuroses.

The Cocaine Habit Among the Negroes.—The cocaine habit among the negroes of the South has of late become alarmingly prevalent. The negroes of New Orleans found that the drug enabled them to perform more easily the extraordinarily severe work of loading and unloading steamboats. The high wages offered by the Mississippi river steamboat owners for the unloading of cargoes is said to have first prompted the negroes to use cocaine as a stimulant. They soon became aware that they could work for seventy hours at a stretch in rain, in cold, and in heat when under the influence of cocaine. This state of affairs is one that certainly calls for the attention of the authorities, and strenuous efforts should be put forth to stop the sale of this drug to the ignorant negro routabouts of the South.

Got Their Fees, Anyway.—McJigger—"Young Dr. Downs recently made $50.00 in a guessing contest."

Thingumbob—"The only one who guessed correctly, eh?"

McJigger—"Oh, no. Two other doctors got the same, and all three of them guessed wrong. You see, they were called in consultation over a patient."—*Philadelphia Press.*

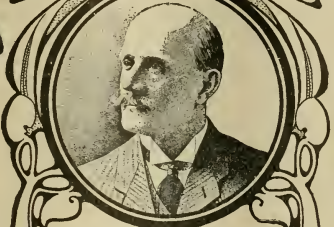
His Provision.—"Oh, doctor! I'm so glad you've come. My little girl has such a ——"

"Now don't tell me what she has, Nellie, 'cos I'm the doctor, an' I've got to try an' guess."—*Brooklyn Life.*

A Good Reason.—Jones: "Why do they call that Pullman porter Doctor?"

Smith: "Why, because he has attended so many berths."—*Cornell Widow.*

Exercise Without Apparatus
Taught by mail — in your own home



FREDERICK W. STONE
Athletic Director of The Stone School of Physical Culture
Formerly athletic instructor of Columbia College and the Knickerbocker Athletic Ass'n, New York. At present athletic instructor of the Chicago Athletic Ass'n, where he has classes daily from 12 to 1 and from 4 to 6. He established the world's record for 100 yards sprint (9 4-5 seconds) and held it unbeaten until 1902. Has been an instructor in physical culture for 32 years.

Mr. Stone's extensive experience with institutions of the highest character better qualifies him than any other instructor to teach men and women the science of self-development.

WE are successfully teaching men and women in every part of the world how to get well and how to stay well; how to broaden the shoulders, deepen the chest, and increase the lung capacity; how to improve the circulation; how to correct chronic complaints of the stomach and bowels; how to obtain sound, restful sleep; how to increase the weight or reduce it. We teach them how to obtain all this physical wealth by exercising only 10 to 20 minutes each day, just before retiring or upon arising. **The Stone Method** is a system of concentrated exertion, by which more exercise is actually obtained in 10 minutes than by the use of apparatus two hours, and embraces a thorough course in **deep breathing** without extra expense. **Does not overtax the heart.** The exercises are rational, moderate, and are taught by an instructor thoroughly versed in physiology. Individual instruction is given in every case according to the requirements of the pupil.

Follow our instructions and we promise you a fine, strong, well-developed physique, which bears every evidence of perfect manhood; a clear brain; a light step; a splendid circulation; a ruddy complexion; bright eyes; sound, easy-working lungs, with plenty of room in which to expand; an increased appetite; good digestion; an active liver; sound, restful sleep; an erect carriage.

WOMEN receive as much benefit from **The Stone Method** as men. However, no woman desires the same muscular development which she admires in men, which proves again the desirability of our individual instruction. We take into consideration the occupation, habits, mode of living, etc., and give instruction accordingly. We can insure perfect health, a good complexion, and, when desired, an increased chest (or bust) development; can increase the weight or reduce it; can fill out those hollow places and give the form that beautiful contour so much desired; can positively reduce the abdomen also.

We should like to hear from every woman who has enough interest in her health and in her perfect development to read this advertisement. We have some literature and testimonials which we will send FREE for the asking, and we are confident they will not only prove interesting, but convincing proof of the superiority of **The Stone Method** over any other system.

Mr. Stone is the only physical instructor paying special attention to women and children. He is ably assisted by Mrs. Ellen Walker, who has had a very extensive experience, and who alone opens and answers letters of a private nature. Confidential letters may be addressed **"Mrs. Ellen Walker, care The Stone School."**

ILLUSTRATED BOOKLETS AND TESTIMONIALS FREE BY MAIL

It is impossible, in this limited space, to convey an adequate idea of the importance of **The Stone Method** of physical culture in attaining and maintaining perfect development and good health. We have prepared a booklet for men and one for women which explain the system in detail, our plan of mail instruction, etc. These booklets contain many photos from life, showing what others have accomplished by **The Stone Method. SENT FREE BY MAIL,** together with fac-simile testimonials, measurement blanks, etc. Write today. The booklets will prove interesting.

The Stone School of Scientific Physical Culture

1687 MASONIC TEMPLE, CHICAGO, ILL.

LONDON: 4 Bloomsbury Street, New Oxford Street, W. C.

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED IN 1881—OPENED IN 1882.

The New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant, and the hospital wards adjoin the lecture rooms. Since the fire in 1896, a new building has been erected and thoroughly equipped, and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James P. Tuttle, M. D.; John A. Wyeth M. D.
MEDICIN —Isaac Adler, M. D.; Morris Manges M. D.; W. H Katzenbach, M. D.; J. D. Nisbet, M D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt H. Wylie, M. D.; Brooks H. Wells, M. D.; W Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—Augus Seiberl. M. D.
DERMATOLOGY—Edward B Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O Born M. D.; W. E Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M D.; Robert C. Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederich Whiting, M. D.
PUROLOGY—B. Sachs, M. D
OBSTETRICE—Edward A. Ayers, M D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York.

THE CHARLOTTE OBSERVER,

CHARLOTTE, N. C.

J. P. CALDWELL, Editor. DAILY AND SEMI-WEEKLY.

North Carolina's Foremost Newspaper.

Independent and fearless; bigger and more attractive than ever. The most complete telegraphic Press reports in existence. All the news of the world. Complete Daily reports from the State and National Capital

SUBSCRIPTION PRICE.

Three Months	$2 00
Six Months	4 00
One Year	8 00

THE SEMI-WEEKLY OBSERVER, Published on Tuesdays and Fridays at $1 00 per year.

CASH OR CREDIT.

Catalogue FREE.

PRICE $33.50

It will pay you to send for our Catalogue No. 6, quoting prices on Buggies, Harness, etc. We sell direct from our Factory to Consumers at Factory Prices. This guaranteed Buggy only $33.50; Cash or Easy Monthly Payments. We trust honest people located in all parts of the world.

☞Write for Free Catalogue.

MENTION THIS PAPER.

CENTURY MF'G CO. DEP'T 352 East St. Louis, Ill.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

PROTARGOL

The Non-Irritating Substitute for Nitrate of Silver.

HEDONAL
The Promoter of Natural Sleep.

TANNIGEN
The Intestinal Astringent

LACTO-SOMATOSE
The Food for Diarrheal Diseases.

FERRO-SOMATOSE
The Ferruginous Nutrient and Tonic.

PHARMACEUTICAL PRODUCTS
BAYER
FARBENFABRIKEN ELBERFELD
New York. 90 Gold St.

HELMITOL
The Urinary Antiseptic, Analgesic.

THEOCIN
The Most Powerful Diuretic

Samples and Literature supplied.

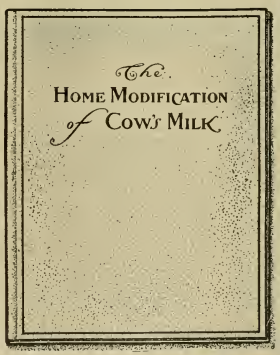
SENT FREE to PHYSICIANS

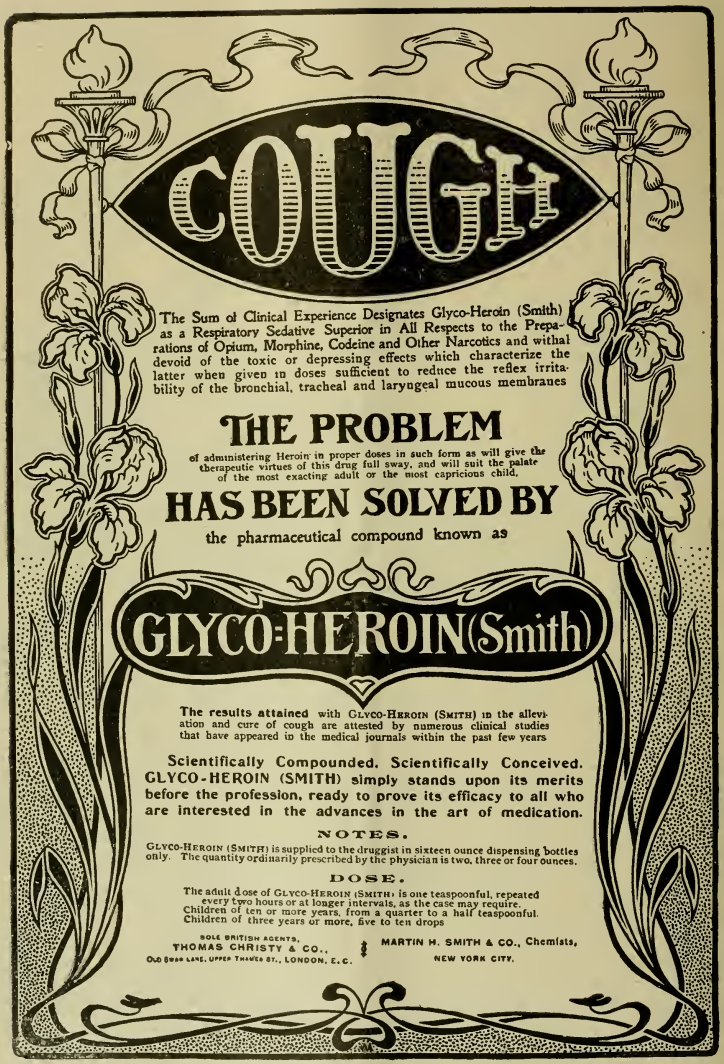
We publish a very useful 32-pp. book on

The Home Modification of Cow's Milk

Printed in two colors on fine coated paper, fully illustrated and bound in cloth, it will make a valuable addition to your library. We should be very pleased to send you a copy free of expense.

Mellin's Food Company
Boston, Massachusetts




COUGH
The Sum of Clinical Experience Designates Glyco-Heroin (Smith) as a Respiratory Sedative Superior in All Respects to the Preparations of Opium, Morphine, Codeine and Other Narcotics and withal devoid of the toxic or depressing effects which characterize the latter when given in doses sufficient to reduce the reflex irritability of the bronchial, tracheal and laryngeal mucous membranes
THE PROBLEM
of administering Heroin in proper doses in such form as will give the therapeutic virtues of this drug full sway, and will suit the palate of the most exacting adult or the most capricious child,
HAS BEEN SOLVED BY
the pharmaceutical compound known as
GLYCO-HEROIN (Smith)
The results attained with GLYCO-HEROIN (SMITH) in the alleviation and cure of cough are attested by numerous clinical studies that have appeared in the medical journals within the past few years
Scientifically Compounded. Scientifically Conceived.
GLYCO-HEROIN (SMITH) simply stands upon its merits before the profession, ready to prove its efficacy to all who are interested in the advances in the art of medication.
NOTES.
GLYCO-HEROIN (SMITH) is supplied to the druggist in sixteen ounce dispensing bottles only. The quantity ordinarily prescribed by the physician is two, three or four ounces.
DOSE.
The adult dose of GLYCO-HEROIN (SMITH) is one teaspoonful, repeated every two hours or at longer intervals, as the case may require.
Children of ten or more years, from a quarter to a half teaspoonful.
Children of three years or more, five to ten drops
SOLE BRITISH AGENTS,
THOMAS CHRISTY & CO.,
OLD SWAN LANE, UPPER THAMES ST., LONDON, E.C.
MARTIN H. SMITH & CO., Chemists,
NEW YORK CITY.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

BROADOAKS SANATORIUM.

ISSAC M. TAYLOR, M. D.

Morganton, North Carolina.

A Private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

The Carolina Medical Journal Reaches all the Doctors of the Carolinas.

St. Luke's Hospital,

1000 West Grace St.,

RICHMOND, VIRGINIA.

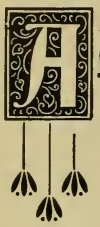
Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,

RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.



S The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our

. . . regular eleven-ounce hexagonal bottle, . . .

you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

TISSUE BUILDING
BY
BOVININE

is most successful because **BOVININE** supplies absolute and perfect nutrition.

It not only stimulates, but completely feeds the new born blood cells, carrying them to full maturity.

It increases the leucocytes and thereby most powerfully retards pathological processes.

As a food and nutrient it is ideal, requiring little or no digestion, and being at once absorbed and assimilated.

For starving anæmic, bottle-fed babies, its results are immediate and most gratifying, as it is a ready alimentation as soon as ingested, and never causes eructation.

It will be found equally reliable for nursing mothers, affording prompt nourishment and strength to both mother and babe.

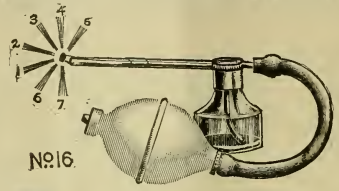
In typhoid fever and all wasting diseases it may be administered per rectum, and will sustain the strength and support the heart without need for recourse to alcoholic stimulants.

Records of hundreds of cases sent on request.

THE BOVININE COMPANY,

75 West Houston Street, NEW YORK.

DeVilbiss Universal Atomizer No. 9. All Metal.—Will throw a spray in any direction desired. Heavy oils and vaseline by heating, light oils and watery solutions without. Can be used with rubber bulb or compressed air **Price to Physicians, $1 25. Postage 6 cents.**



Two bottles furnished with this instrument. One to be used for water solutions and the other for oil.

The DeVilbiss Universal Atomizer, No. 16.—Unexcelled for patient's own use. **Price to Physicians $1 25.** Some of the advantages of the DeVilbiss Universal Atomizers over others are:

1. They throw a spray of any kind of liquid, oils, aqueous or alcoholic solutions.
2. The point can be turned in any direction, consequently it will do the work of three atomizers of any other style without extra tips, which are liable to be lost when you need them most.
3. By closing hole in cap on bottle with the finger, a very coarse spray or stream will be thrown which serves to clean it out or can be used for douching.
4. Medicine may be mixed in the bottle by closing the hole on cap of point with the finger, and turning on air current or compressing the bulb
5. All parts are interchangeable; any part can be replaced that may be broken or lost.
6. Our improved connection enables them to be used with either a bulb or cut-off without extra fittings.

DIRECTIONS AND GUARANTEE TO PURCHASER.

To make aceptic, unscrew hard rubber piece, place in a carbolized solution and boil metal part and bottle.

To clean Spray Tube, put cleansing solution in cup, place thumb tightly over hole in cap on bottle and by using air pressure a heavy spray will be thrown from point of tube. Should this fail to clean the tube, unscrew cap "A" and remove particles with a tooth-pick. Be sure to run it through small opening as this must be kept clean in order to have perfect atomization. Should it not work, remove point "C" as shown in illustration with a knife blade; take out all particles with a pin or tooth pick from the openings in the point and replace in the same manner as removed with the letters "UP" on the upper side. Should this fail, return to us and we will repair or replace free of charge.

DeVILBISS MFG. CO., Toledo, Ohio.

PEACOCK'S BROMIDES

PURITY
STRENGTH
STRONGEST IS THE CHEAPEST

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.
DOSE:
One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., St. Louis

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day.

OD CHEM. CO., NEW YORK.

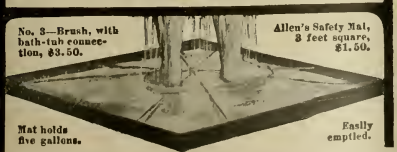
A Bath for Beauty and Health.

Allen's Fountain Brush and Bath Outfit

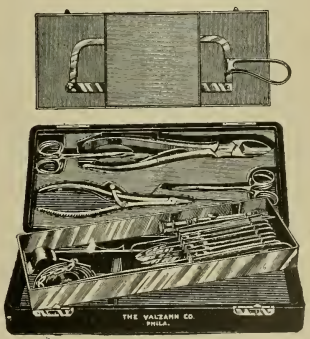
Friction, Shower and Massage Combined. The only Sanitary Bath Brush that at one operation thoroughly cleanses the skin, imparting a healthy tone and glow, and puts one in a condition to resist colds, la-grippe and all contagious and infectious diseases. Furnished either for bath tub connection, or with our fountain and Safety Portable Floor Mat. Enabling one to take a perfect spray and frictional bath in any room. With this outfit one is independent of the bath room, as a better bath can be taken with two quarts of water, than with a tub-full the old way. Insures a clear complexion, bright eyes, rosy cheeks, cheerful spirits, sound sleep. Should be in every home, and every travelers trunk or grip. Full outfit No. 2, consisting of Fountain Brush; combination rubber hot water bag; bath fountain and syringe and safety mat. Price $5.50.

Agents are making from $25 to $75 per week selling these outfits. Send for FREE booklet, "The Science of the Bath," prices and terms.

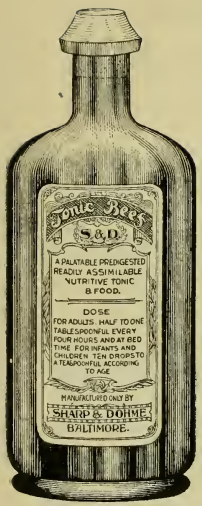
THE ALLEN MANUFACTURING CO., 429 Erie St., Toledo, O.



Valzahn Co.'s Amputating and Trephining Case.



Contents—1 Amputating Knife, 1 Scalpel, 1 Finger Knife, 1 Tenatome, 1 Curved Sharp Bistury, 1 Curved Blunt Bistury, 1 Tenaculum, 1 Grooved Director, 1 Pair Probes, 1 Trephine, 1 Tourniquet, 1 Dressing Forcep, 1 Amputating Saw, 1 Bone Forcep, 1 Needle Holder, 1 Straight Scissor, 1 Curved Scissor, 2 Pean's Haemostatic Forceps, 2 Tait's Haemostatic Forceps, 6 Needles, 1 Card Silk, 1 Coil Silver Wire, 1 Coil Catgut. All in fine Leather Case, $17.00. Knives are in Aluminum Rack removable to facilitate sterilization. **The Valzahn Company,** Manufacturers and Importers of Surgical Implements and Hospital Supplies, 132 South 11th Street, Philadelphia, Pa.


Tonic Beef
S&D
A PALATABLE PREDIGESTED READILY ASSIMILABLE NUTRITIVE TONIC & FOOD.
DOSE
FOR ADULTS HALF TO ONE TABLESPOONFUL EVERY FOUR HOURS AND AT BED TIME FOR INFANTS AND CHILDREN TEN DROPS TO A TEASPOONFUL ACCORDING TO AGE
MANUFACTURED ONLY BY
SHARP & DOHME
BALTIMORE.

BEEF, WHEAT
AND EGGS

SHARP & DOHME'S

TONIC BEEF

Dose for dose presents

MORE AND BETTER FOOD VALUE

than any other liquid food

PREDIGESTED

PALATABLE PERMANENT

MADE ONLY BY

SHARP & DOHME

BALTIMORE
CHICAGO–NEW ORLEANS–ST. LOUIS
NEW YORK

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

Send for Sample Copy of the

ANNALS OF SURGERY

A Monthly Review of Surgical Science and Practice, Edited by LEWIS STEPHEN PILCHER, M. D , LL.D., of New York. With the Collaboration of J. William White, Ph.D., M. D., of Philadelphia ; William MacEwen, M. D , of Glasgow; W. H A. Jacobson, M Ch., of London.

Each Number Contains Transactions of the Chicago Surgical Society, New York Surgical Society, Philadelphia Academy of Surgery, with original memoirs illustrated by half-tone engravings made from original photographs and drawings. A Monthly Index to Surgical Progress and Review of Home and Foreign Surgical Publications.

Published Monthly by **J. B. Lippincott Company,** Philadelphia, Pa. Great Britain: Cassell & Co., Limited, London. Australasia: Chas. Markell & Co., Sydney, N. S. W.

Price in the United States, $5.00 a year in Advance.

Single Number, 50 cents.

Price in Great Britain and Australasia, One Guinea a year in advance.

Single number, Two Shillings.

Table of Contents.

PAGE

EDITORIAL ABSTRACTS:

Big Endowments 209

Nature's Cure for Asiatic Cholera 209

The Importance of the Vasomotor System as a Factor in Disease 210

The Doctor's Bills 211

ORIGINAL COMMUNICATIONS:

The Complications of Appendicitis: A. H. Royster, A. B , M. D. 213

Management of Injuries to Fingers and Hands: D. A. Stanton, M. D. 220

Surgery of the Hand: W. J. McAullay, M. D. 221

SELECTED PAPERS 223

NEWER MATERIA MEDICA 228

REVIEW OF MEDICAL AND SURGICAL PROGRESS 231

THERAPEUTIC HINTS 240

BOOK REVIEWS 244

MEDICAL NEWS AND ITEMS 250

Hagee's Cordial Cod Liver Oil Comp,
Tonic, Alterative,
Stimulant, Nutritive,
Reconstructive, Digestive.
Causes rapid accumulation of flesh and strength, gives tone to the functions of assimilation and secretion, promotes metabolic changes, encourages healthy cell action and excretion.
HAGEE'S CORDIAL contains all the medicinal principles of pure Norwegian Cod Liver Oil without the grease. No decomposed liver tissue. No fishy odor. No eructation. Formula on every bottle.
PRESCRIBE
Cord. Ol. Morrhuae Comp. (Hagee)
and your patients will take it.
Put up in 16 oz. bottles only
KATHARMON CHEMICAL CO.
St. Louis, Mo.
NEVER SOLD IN BULK

Index to Advertisers.

	PAGE
Fairchild Bros. & Foster.....Cover	1
Parke, Davis & Co. ..... "	1
Lambert Pharmacal Co..... "	2
Mr. Fellows..... "	3
The Sanitarium..... "	4
Glycosine Phosphate Co ..... "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.	1
Martin H. Smith Co	2
Broadoaks Sanatorium.....	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.....	5
DeVilbiss Mfg. Co.....	6
Peacock Chemical Co	7
Od Chemical Co.....	7
Allen Mfg Co.....	7
The Valzahn Co.....	7
Sharp & Dohme.....	8
J. B. Lippincott Co	9
Katharmon Chemical Co.....	10
Mariani & Co.	11
The Antikamnia Chemical Co.....	11
Oakland Chemical Co	12
Battle & Co.	12
University of Pennsylvania	13
The Halcyon Retreat.....	13
Kress & Owen Co.	13
The Purdue Frederick Co.....	14

	PAGE
Rio Chemical Co.	14
Wm. R. Warner & Co.	239
Charles N. Crittenton Co.....	241
Invalids Table Co.	242
The Keeley Institute.....	242
Dad Chemical Co.....	242
Leukretol Chemical Co.	243
Dr A. M. Whisnant	245
Dr. John R. Irwin.....	245
The Tilden Co.....	246
Dr. E. R. Russell	247
Dr. A J. Crowell.....	247
Dr. W. O. Nisbet.....	247
Dr. W. H Wakefield	247
The Presbyterian Hospital.....	249
Sultan Drug Co.	249
Robinson-Pettet Co.	251
The Terry Heater Co	252
Clinic Publishing Co.....	253
W. D. Allison Co.....	257
Maplewood Sanatorium.....	257
Munn & Co.....	257
R. L. Polk & Co.....	257
Presbyterian College for Women	258
J. M. Echols Co.	259
N. Y. Poly. Med School and Hospital	260
The Charlotte Observer	260
Century Mfg. Co.....	260

Written Endorsements From More Than 8000 Physicians.

VIN MARIANI INTRODUCED NEARLY HALF A CENTURY AGO

"The Preparation which made Coca known as a remedy!"

Priority, Facilities and Processes of Manufacture

MAINTAIN MARIANI COCA PREPARATIONS INIMITABLE.

AVOID "COCA WINES" Extemporaneously made with **Cheap Wine and Cocaine.**

Substitutes harm Patient and Physician and betray confidence in the unique properties of Coca.

VIN MARIANI

Represents TRUE COCA with a Sound Nutritious FRENCH WINE;

An Adjuvant to all other Remedies in

Convalescence — Wasting Diseases — Neurasthenia

THE COCA LEAF

A PERIODICAL ADVOCATING
THE RATIONAL USES OF COCA
MAILED FREE
TO PHYSICIANS ON REQUEST.

And Allied Conditions from any cause.

Inquiries from Physicians Receive Ethical Consideration.

MARIANI & CO.,

52 West 15th Street, New York.

PARIS. LONDON, BERLIN, MONTREAL. Laboratories: Neuilly Sur-Seine, FRANCE

| AK | Antikamnia & Salol Tablets
Antikamnia & Quinine Tablets | AK | Antikamnia & Codeine Tablets
Antikamnia & Heroin Tablets | AK |

ECTHOL, NEITHER ALTERATIVE NOR ANTISEPTIC IN THE SENSE IN WHICH THOSE WORDS ARE USUALLY UNDERSTOOD. IT IS ANTI-PURULENT, ANTI-MORBIFIC--A CORRECTOR OF THE DEPRAVED CONDITION OF THE FLUIDS AND TISSUES.

SAMPLE (12-oz.) BOTTLE SENT FREE ON RECEIPT OF 25 CTS.

FORMULA:--Active principles of Echinacia and Thuja.

BROMIDIA
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U.S.A.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions.

University of Pennsylvania

Department of Medicine.

The 138th Annual Session will begin on the last Friday in September, 1903, at 12 m., and will end at Commencement, the third Wednesday in June.

The Curriculum is graded, and attendance upon four annual sessions is required.

Practical Instruction, including laboratory work in Chemistry, Histology, Osteology, Bacteriology, Pathology, Physiology and Pharmacy, with bedside instruction in Medicine, Surgery, Gynæcology and Obstetrics, is a part of the regular course, and without additional expense.

For catalogue and announcement containing particulars, apply to

DR. CHAS. H. FRAZIER, Acting Dean,

36th St. and Woodland Ave., Philadelphia.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.

Dr. W. F. Goldsmith, General Surgery.

Dr. C. C. Stockard, General Medicine and Drug Habits.

Dr. S. G. C. Pinckney, Nervous Diseases.

Dr. J. M. Crawford, Eye, Ear, Nose and Throat.

Dr. Michael Hoke, Orthopoedic Surgery.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

7 W. Cain Street, Atlanta, Ga.

THE ALKALINITY OF BLOOD SERUM

GLYCO-THYMOLINE

(KRESS)

ASEPTIC
ALKALINE, ALTERATIVE

A Purgative for Mucous Membrane

INDICATED IN ALL CATARRHAL CONDITIONS

HASTENS RESOLUTION
FOSTERS CELL GROWTH

SAMPLES AND LITERATURE ON APPLICATION

KRESS & OWEN COMPANY, 221 Fulton St., New York.

FIRST OF ALL

insist on rest and freedom
from care; then always prescribe

GRAY'S Glycerine TONIC Comp.

This, authorities state, will,
if persistently followed, overcome
any case of general debility, nervous
exhaustion or neurasthenia.

THE PURDUE FREDERICK CO.,
No. 15 Murray Street, New York.

A Useful Nerve Stimulant and Tonic.

CELERINA is a powerful stimulant WITHOUT the depressing AFTER-EFFECTS of alcohol, caffeine, nitro-glycerine, etc. It is also a reliable Nerve Tonic. A pleasant exhilaration is experienced after a dose of one or more teaspoonfuls, and under its continued use a renewed capacity for mental and physical exertion results. It is indicated in all forms of exhaustion, mental inertia and senile weakness.

DOSE: One or Two Teaspoonfuls Three Times a Day.

A SAMPLE BOTTLE SENT FREE TO ANY
PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

RIO CHEMICAL CO., - - NEW YORK.

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., MAY, 1903. No. 5

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

Subscription $1.00 per year, in advance.
Subscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
Receipts.—The receipt of all money is immedately acknowledged.
Important Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it continued expecting to receive a remittance at their earliest convenience.
We Notify all subscribers when their paid subscription expires.

EDITORIAL ABSTRACTS.

BIG ENDOWMENTS.

The *Philadelphia Medical Journal,* March 21, views with concern the establishment of the great new institutes for scientific research, fearing they will take the best men away from the medical schools and profession. Research work has been done mainly by men in close touch with the medical practitioner, demanding results. The successful laboratory worker has never got very far away from the body of the profession.

With the establishment of the Carnegie and Rockefeller institutes things have changed. The pure scientist can now return to a cell where he can cogitate and experiment undisturbed by the clamors of the class room or the practitioner.

Medical science should be made available. It must be practical and adapted to its ends by men who are thoroughly in sympathy with those ends. To do this it must have a clinical field as well as a laboratory, and its findings must be made intelligible by men who are in constant touch with its practitioners.

NATURE'S CURE OF ASIATIC CHOLERA.

Dr. W. B. McLaughlin, of Austin, Texas, a returned medical officer in the Philippines, contributes an interesting article under the above head in the April *Texas Medical Journal.* As a result of his observation and study, the doctor notes "that cholera is a disease accompanied, as a rule, by vomiting, purging and a rise of from 2 to 5 degrees of the internal bodily temperature, and that it terminates in one of three ways: By direct convalescence; by a febrile reaction, or by death from collapse.

"Admitting the above observation as true, it seems to me that the conservative efforts of nature are directed to ridding the organism of the vibrio, by the vomiting and purging, and if the infection is so severe that she cannot accomplish the object by this alone, she raises the bodily temperature to a point when the growth of the vibrio is interfered with, or even inhibited. Unfortunately, both the diarrhea and the fever are a severe tax on the vitality of the patient,

and he frequently succumbs from collapse, or the febrile process, once started, refuses to be controlled, and he dies from hyperpyrexia.

"In most of the infectious or contagious diseases, it is now believed that they are limited as to the time of their duration, by the formation of an antitoxine which inhibits their growth, and the best efforts of many modern investigators have been directed toward the isolation of these antitoxines, so that, by their administration, we might bring about an artificial crisis in the disease, many days in advance of the time required by nature to accomplish the same object. In this manner the patient is saved days of suffering and danger.

"In my opinion, heat in cholera is the analogue of Behring's antitoxin in diphtheria, and that by causing an early rise in temperature in cholera patients, we can render the disease one of an extremely low mortality.

"Remembering the experiments of Martin and Han, in which, by giving an enema, to a healthy adult, of water at a temperature of 115 degrees, the temperature of the person was raised 5 degrees in 25 minutes, I determined to adopt this method of raising the body temperature on account of the auxiliary advantage in flushing out the colon thoroughly. I used a normal salt solution of 112 degrees, and passed from one to two quarts above the sigmoid flexure. In all I used this treatment on five cases.

"The first case was in a state of extreme collapse at the time the injection was given, and died within the hour without any sign of reaction.

"The second case died within ten hours with hyperpyrexia.

"After this the temperature was reduced to 110 degrees, and an ice bag was applied to the patient's head during its administration. The three remaining cases made good convalescence, entering the stage of reaction, in each case, within an hour of the administration of the injection.

"I am aware that these observations are incomplete, and imperfect, but illness compelled me to leave the Philippines at this time, and I had no opportunity to give this method further trial. I therefore submit this article as it is, hoping that the ideas outlined herein may be of value in the treatment of this terrible disease."

IMPORTANCE OF THE VASOMOTOR SYSTEM AS A FACTOR IN DISEASE.

In the *Therapeutic Gazette* of March, Dr. H. A. Hare writes on the above subject and takes the position that in many cases of supposed cardiac failure the heart is really not at fault, but the blood vessels being relaxed, stasis of the blood occurs in the capilliaries and the patient is practically bled to death into his own blood vessels, so that the heart fails, because it could not get blood enough to fill its own arteries. Hence, the importance of giving close attention to the vaso-motar system in all cases of illness when the circulation seems to be failing. Dr. Crile, of Cleveland, has made some very valuable observations on the vaso-motor system in surgical conditions. Curtis' experiments may be considered as amplifications of the views of the writers; also H. C. Wood and Leonard Hill, of London, who showed that pressure upon the great abdominal vessels was a valuable measure for the maintenance of arterial tension in shock. In this condition strychnine, digitalis and alcohol stimulate the heart, but the real need is a stimulant of the vaso-motor system, and to provide support for the blood vessels in the extrem-

ities so that the circulation may be carried out satisfactorily in vital portions of the body.

Grile has found that the restoration of what might be called the approximate normal blood pressure can be effected by adrenalin, which at the same time restores the activity of the heart muscle. He recommends that adrenalin be given often and in minute dose, as it is quickly oxidized by the blood and is comparatively fleeting in its influence unless the dose be frequently repeated.

THE DOCTOR'S BILLS.

In the *Medical Mirror*, January, Dr. Robt. T. Morris discourses instructively concerning a matter of the greatest interest to the medical practitioner, that of his bills. It is a sad, but well known fact that no profession suffers as does the medical in the matter of receiving adequate payment for services rendered, and the doctor is almost always the last to be paid. Dr. Morris points out that a man, in order to be well qualified to fulfill the duties of a physician or surgeon, must gain the requisite knowledge at great expense, and not only this, but when in practice he must keep himself *au courant* with the latest discoveries, new modes of operation or treatment and most recent literature pertaining to his profession. The life of a successful medical man is an arduous one, and calls for a continual drain upon his mental and physical resources, as well as upon his pocket. To lead such a strenuous existence—even if he be of iron constitution—he needs a vacation of at least two months in the year. When at home, too, he must live in good style, dress well, and in all respects sustain the dignity of his calling. It therefore is a self evident fact that the doctor should be well remunerated, and thus his bills should be paid promptly.

The majority of medical men, however, if asked would undoubtedly say that the money due to them does not come in so rapidly as they could wish. Dr. Morris places his finger on one of the weak spots in a doctor's make-up when he refers to leniency in charges and carelessness in collecting bills, and demonstrates the fallacy of so doing. His patients understand his motives, and can classify him accurately. In the writer's own words: "If he is too lenient in making charges and too slack about collecting bills, they understand that he is not putting himself in position to render them the very best sort of service, because they know that he cannot prepare himself for rendering the best service. If the doctor prepares himself for giving large services in a large way, he is at once in demand by the sort of people who are in the habit of making use of that sort of service in their lawyers and engineers." As to the charging of large fees, Dr. Morris thinks that such a procedure is quite right when the patient has received from the treatment beneficial effects, which has, perhaps, enabled him to continue in the control of a large business to his consequent great pecuniary advantage. If a rich man calls in a well-known physician he must expect to pay as much for the expert knowledge in safeguarding his health as he would to a lawyer for assisting him to advance his material interests.

Dr. Morris concludes as follows:

"While the conditions in the smaller towns are different from those in the cities, the principles remain the same, and the physician who has expensively prepared himself for good work, or who out of experience has developed into a skilful physician, has a right to ask for compensation freely and promptly, without in the least including any mercenary

motives. His bills should be regularly sent out at least once a month, and if not paid by the end of the third month go to the collector, unless the patient states a reason why such a business proceeding should not be applied in his case. If the reason is a good one, there are very few physicians indeed who cannot be depended upon to respect it, and to make the most kindly and generous disposition of the account. The important thing is to bring the matter to a business point in a business way at an early date, in order to give the doctor opportunity to be kind to his patient or just to himself."—*Med. Record.*

We wish to solicit from our readers, reports of unusual or interesting cases, too brief perhaps, for a completely written paper, but suitable for recording under "Clinical Notes." Many matters of value to the profession can thus easily be recorded which otherwise will be neglected and never become available for further reference. We wish our pages to be utilized for whatever will be of benefit to the profession.

MISCELLANEOUS.

Nuggets From Georgia.—De rainy day is a time fer a man ter stay home en thank God de bill collector can't git out.

Folks what all time callin' fer fire in dis worl' will be de very ones what'll do de loudes' hollerin' fer ice hereafter.

W'en de cow kicks de milk over, stidder beatin' de cow, de wise man turns her out ter graze, en consoles hisse'f by sayin' dat milk ain't healthy, nohow.

Dey calls dis worl' a howlin' wilderness, en yit dey can't lay holt er a man silent enough ter draw a sal'ry in a sideshow!

I don't study 'bout de question er how many days hit took ter make de worl'; de leadin' question wid me is how many days will I be in it?—*Atlanta Constitution.*

Divine Right.—The New York *Times* tells this story of George F. Baer:

One evening during the strike the president of the Reading Railroad was homeward bound in a street car, when a fellow passenger who had a little clearing and a lot of woodland up on the mountain began to expound his theory that as coal was one of nature's gifts, the public had a right to help itself to anthracite.

Mr. Baer listened patiently to the harangue, and said quietly:

"That's a good idea, Mr. ————. I am short of wood, and I'll just send a man up to your place to cut a few cords for me. Trees are nature's gifts, you know."

Don't forget the meeting of the North Carolina Medical Society at Hot Springs on June 2d. Hot Springs, lovely at all times, will be simply charming at that season, as the mountain scenery is then at its best. The Hot Springs people, too, know how to entertain. Be there, doctors, without fail.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

The Carolina Medical Journal

COLLABORATORS.

H. T. Bahnson, M. D., Salem, N. C.
J. Howell Way, M. D., Waynesville, N. C.
J. Allison Hodges, M. D., Richmond, Va.
S. Westry Battle, M. D., Asheville, N. C.
Geo. G. Thomas, M. D., Wilmington, N. C.
J. P. Munroe, M. D., Davidson, N. C.
Manning Simons, M. D., Charleston, S. C.
S. C. Baker, M. D., Sumter, S. C.
R. L. Payne, M. D., Norfolk, Va.
H. S. Lott, M. D., Winston, N. C.
J. W. Long, D. D., Salisbury, N. C.
H. A. Royster, M. D., Raleigh, N. C.
Albert Anderson, M. D., Wilson, N. C.
Francis L. Parker, M. D., Charleston, S. C.
Chas. W Kollock, M. D., Charleston, S. C.
Davis Furman, M. D., Greenville, S. C.
F. Julian Carroll, Summerville, S. C.
Translation and Foreign Reviews, Richard H. Whitehead, M. D., Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.

Contributors for the Original Department of The Journal are received, with the understanding that they are contributed exclusively to this Journal.

Illustrations necessary to elucidate the text will be provided without expense to authors when suitable ink drawings or photographs are furnished.

Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

The Complications of Appendicitis.

By H. A. Royster, A. B., M. D., Raleigh, N. C., Professor of Gynecology, Medical Department University of North Carolina; Gynecologist to Rex Hospital; Surgeon in Charge of St. Agnes' Hospital; Local Surgeon to Southern Railway.

It would be considered an act of presumption for any abdominal surgeon at this day merely to present cases illustrating large numbers of operations on the vermiform appendix. For these operations are being done so frequently over the whole world and with such a low mortality in many hands, as to cause no unusual comment. In fact, removal of the appendix in simple cases, either during or between attacks, is perhaps the easiest operation in the abdominal cavity. Barring accidents and a faulty technique, which is the unpardonable sin, none of the interval cases should be lost, and practically all of the acute ones ought to be saved if operated upon early.

However, it is not my purpose here to discuss the mortality or the treatment of appendicitis, but rather to point out certain complications of the disease, with the intention of elucidating some difficulties in their diagnosis and management. Incidentally, I shall describe a few unique cases which have occurred in my own experience, believing it will be profitable to notice some of the rarer conditions not ordinarily mentioned by the authorities.

1. *Peritonitis.*—First and foremost, peritonitis stands as the complication which occurs more frequently and is more to be dreaded than any other. It may result from a perforation of the appendix or from extension of the inflammation by continuity of structure. The micro-organisms concerned are the common bacillus of the colon and the usual pus-producing cocci. Infectious peritonitis will occur sooner or later in all suppurative cases of appendicitis, very early in the fulminant forms, more tardily in those of slower development. Unless speedily relieved, every case thus complicated must be fatal. General peritonitis is recognized without dif-

ficulty—a resistant, board-like condition over the whole abdomen, with extreme tenderness and distention; a rapid, wiry pulse and an anxious facial expression. The question of operating in such cases is still debatable. Some surgeons would submit all of them to immediate operation, giving the patient the only chance, though the tide be against him; while others refrain from interfering in what they regard as hopeless conditions, being unwilling, as they aver, to bring a beneficent surgical procedure into disrepute for no good purpose. These so-called "eleventh hour cases" are occasionally rescued by rapid work, repeated hot saline flushing and the judicious employment of drainage. The outlook undoubtedly depends more upon the virulence of the systemic infection than on the amount of local mischief present. Discussion of this part of our subject would lead us into devious paths and more elaboration is unnecessary.

2. *Intestinal Obstruction.*—The appendix as a cause of intestinal obstruction has been commented on by a few writers. The most frequent method of its production is through the formation of adhesions, which cause a bending or twisting of the bowel. More rarely it is brought about from the encircling of the small intestine by the inflamed appendix, constricting the lumen and producing strangulation. A case of this character came under my care last year: H. P., colored, was admitted to Rex Hospital on August 19, 1902, with marked symptoms of intestinal obstruction, dating back four days. He was *in extremis*. The pulse was 135 and the temperature 101. The abdomen was opened in the median line and the appendix was found wrapped tightly around the ileum three inches from the cecum, the whole area being embedded in a mass of plastic lymph. After removing the appendix, a hasty resection of the gangrenous intestine was made by means of the Murphy button and the cavity drained. The patient died from exhaustion the next day. When we think of the conditions present in every appendiceal lesion, it is a great wonder that more of these cases have not been seen. Their scarcity is very likely due to the fact that the appendix is so seldom found pointing inward and lying in close relation with the small bowel. I once saw in the practice of another surgeon a case in which bands of adhesions passed from the tip of the appendix around the colon, producing intense pain and partial obstruction. Though the symptoms were definitely localized, it was difficult to determine beforehand whether it was simple appendicitis or occluded intestine. As a rule, the bowels are easy to empty in appendicitis and, if such is not the case, the idea of intestinal obstruction should be entertained and the appendix as a possible cause must not be lost sight of.

3. *Floating Kidney.*—The association of appendicitis and floating kidney has been found so often, especially by those who operate largely on women, as now to occasion no surprise. Edebohls, in 1894, was the first to call systematic attention to the condition. He devised the operation of removing the appendix through the lumbar incision and then anchoring the kidney in the usual manner. Manton (1) has recently written of the great frequency of this complication and believes it to be more than a mere coincidence. He regards nephroptosis as the most common cause of chronic appendicular disease. Out of 73 patients with mobility of the right kidney, he diagnosticated chronic appendicitis in 48, or over 65 per cent. Floating kidney is more apt to complicate the chronic forms of appendicitis

and the recognition of its presence is generally not difficult. During an acute exacerbation, however, the muscular resistance may be so great that without anesthesia it may be impossible to palpate the region thoroughly. Whether in the majority of cases the inflamed appendix predisposes to displacement of the kidney or whether the floating kidney produces the recurrent appendicitis, it would be too much to say. Ochsner thinks that the increased intra-abdominal pressure and the extensive adhesions incident to chronic appendicitis may help to account for the mobility of the kidney. It seems natural also to assume that a kindey dislocated by other causes would tend to disturb the circulation in the appendix, a pathological change essential to disease in that organ. According to Edebohls, the movable right kidney compresses the superior mesenteric vessels between the head of the pancreas and the spinal vertebrae, thus producing congestion and subsequent inflammation of the appendix. In individual cases the history might be of great aid in determining which was the primary lesion.

I have had four cases of appendicitis with floating kidney in the same patient and these were observed within a period of two months. They were all women, three married and one single. Only two came to operation and both refused to submit to nephropexy, preferring to have the more serious evil alone relieved. I think that, in cases where the two conditions are to be attended to at one sitting, Edebohl's method is a proper procedure. Should the operator not be sufficiently skillful to get the appendix through the lumbar incision, he may close this and open the abdomen—an alternative to which more than one surgeon has had to resort.

4. *Gall-Stones.* — The simultaneous occurrence of gall-stones and appendicitis is remarkably frequent. One high authority states that 35 per cent. of patients with cholelithiasis have also had appendicitis. The appendix is many times found adherent to the gall-bladder. Just as in the case of floating kidney, the same query arises here as to which one of these organs is the original causal agent in the production of disease in the other. Numerous theories could be offered to support views on either side and the problem might then be no nearer a solution. The practical fact is that, independently of adhesions, appendicitis is repeatedly accompanied by gall-stones, and *vice versa,* so that in operating for either of these conditions the other should be suspected. When the symptoms suggest this complication, it is well to make the incision at the proper point through the right rectus muscle, in order to include the regions of both organs.

My experience in the matter may be expressed by notes of the one illustrative case which I have had: Mrs. W. H. B., age 28 years, had a typical attack of mild typhoid fever extending from July 23 to September 12, 1902, and made a perfect recovery. During the night of October 30, she was seized with severe pain in the back, about the fourth lumbar vertebra. This was relieved by appropriate treatment, but the next day at noon it returned, at that time radiating around the right side to the region of the liver, toward the umbilicus and finally over the whole abdomen. The temperature varied between 100 and 101 degrees. On November 6, when I first saw the patient, examination of the abdomen revealed a tender, somewhat movable mass in the right hypochondrium, extending to the upper iliac region and nearly to the midline. McBurney's point was very sensi-

tive, though there was no marked rigidity and no distention. Operation, November 8, 1902; appendectomy and cholecystostomy. An incision was made parallel with and to the outer side of the right rectus over the prominence of the swelling in the hypochondriac region. The omentum and intestines were densely adherent and after enucleating the mass it was seen to be the enlarged and thickened gall-bladder. This was pushed upward and the wound enlarged downward, so that the appendix, inflamed, kinked and adherent at its tip, could be removed. The lower part of the incision was then closed with silkworm gut sutures and the gall-bladder stitched to the upper part. When it was opened, a small quantity of mucopus and sixteen biliary calculi were evacuated. No stones were found beyond the cystic duct. Hot saline irrigation and gauze drainage completed the operation. Convalescence was uneventful, save for the persistence of the biliary fistula.

5. *Adhesions to Other Organs and to Abnormal Growths.*—The appendix may adhere to any structure in the abdominal cavity. It may form adhesions to normal organs without altering their condition or become involved in inflammatory exudates and other morbid processes. In women the appendix is most often adherent to the right adnexa, both in their healthy and their diseased state. In one instance I found it growing to the right ovary in a girl who had dysmenorrhea only after the beginning of the appendiceal attacks. It is frequently adherent to a right-sided pus-tube. At a recent meeting of the London Gynecological Society, (2) an interesting discussion was had on adnexal disease involving the appendix, the specimen being shown by Dr. Macnaughton-Jones. Several cases were recalled by other surgeons present. Mr. Jessett spoke of one in which the appendix was "attached to the stump of an old operation" and "agreed with Dr. Jones that it was well to examine the appendix in all operations for adnexal troubles." Mayo Robson had seen three such cases and emphasized the fact that the frequency of these complications was an argument against vaginal operations. Another common adhesion-point for the appendix is the liver. Twice have I found it adherent to this organ, once in each sex.

The appendix not infrequently becomes entangled in the growth of an abdominal tumor and attaches itself wherever adhesions happen to form from the localized peritoneal inflammation. This added danger renders operation for such tumors the more necessary. Over and over again we are compelled to remove the appendix under these circumstances. A short time ago Howard Kelly directed notice to this question and insisted on the routine examination of the appendix in every abdominal operation. The result of his own views and of those of the large number of operators quoted by him was to advise removal of the appendix, if adherent or diseased, but not otherwise. As evidence of the manner in which the appendix may become involved in extensive disease of the pelvic organs, it may be well to relate a recent case of my own. Martha B. was operated on for a fibroid of the uterus. When the abdomen was opened, a formidable array of matted intestinal adhesions met the sight. These were with the greatest difficulty separated and the following pathological conditions discovered: a large intraligamentous fibroma; an ovarian cyst on the left side; a pyosalpinx on the right; an inflamed appendix adherent

to this and enveloped in a roll of omentum. Total ablation of the pelvic structures was done and the appendix removed. While straightening out adherent intestines in the deep pelvis, the pyosalpinx was ruptured and the sigmoid flexure torn completely through. An end-to-end anastomosis with sutures was effected and the abdomen flushed, but not drained. This woman made a marvelous recovery. She rallied quickly from the shock following such a necessarily prolonged operation and never had a bad symptom. Her bowels moved on the fifth day; she sat up first during the third week.

6. *Pregnancy.*—In these days of refinement in diagnosis and boldness in treatment, the recognition and cure of appendiceal lesions complicating the pregnant and puerperal states may enlist the responsibility of any practicing physician. The management of appendicitis occurring in pregnancy presupposes a thorough knowledge of obstetric and abdominal diagnosis and the courage to apply the appropriate treatment. The prognosis rationally depends upon the stage at which the condition is found. It is dangerous only as the infected appendix itself is dangerous; the pregnancy adds but little to the risk. Fowler states that in diffuse peritonitis the mother and child are invariably lost; but that in cases which are diagnosticated early the women recover and have normal deliveries. Carstens (3) reports five cases of appendicitis in pregnant women, with two deaths, one being an acute suppurative attack and the other due to shock following abortion which occurred 24 hours after operation.

A case on which I operated last year demonstrates the difficulties in diagnosis as well as the need for immediate interference. Mrs. E. L., age 38, was first seen by me at her home in another town. She was advanced six months in her seventh pregnancy and had "never felt right" during the entire gestation period. Her physician, who kindly referred her to me, had detected an abnormal growth in the abdomen a month or two before. Four days previous to my visit the patient was suddenly seized with vomiting, pain and fever; followed by a gradually increasing distention of the abdomen. On examination the temperature was 101 and the pulse 120; the abdomen presented diffuse tenderness and rigidity and, besides the pregnant womb, nothing could be made out beyond a vague enlargement in the epigastrium. The most probable diagnosis was thought of, viz., ovarian cyst with torsion of the pedicle. The patient was brought to Rex Hospital the next day and prepared for immediate operation. The abdomen was opened in the median line and a large ovarian cyst recognized at once. Tracing it downward, its pedicle was found to be twisted four times to the right, while the appendix was plastered firmly around it, being involved in the torsion. These turns were quickly pulled apart, the cyst pedicle ligated and the appendix taken away. A prompt and perfect recovery was the immediate result; an easy birth at term was the sequel. The baby had inanition and lived but a few days. The cyst was severely strangulated, its contents being a dark chocolate-colored material and its walls containing minute hemorrhagic points with beginning sloughs. The appendix was infected within and inflamed without.

7. *Injuries.*—It is so rare that the appendix is injured in gun-shot wounds of the abdomen that I shall dismiss this division of our subject with the report of what I consider the most remarkable

case on my records both as to the lesions found and the result secured. For the privilege of reciting this case I wish to thank Dr. J. R. Rogers, of this city, surgeon to the Seaboard Air Line Railway, and Dr. C. P. Rogers, now of the resident staff at the Johns Hopkins Hospital, Baltimore. Through courtesy of the latter I was permitted to operate on the case and to his intelligent after-treatment is due in no small measure the successful issue. Briefly stated, the case is as follows: J. M., a strong, healthy colored man, while on a moving train August 19, 1902, received a pistol ball in the abdomen at close range. He was brought to Raleigh by Dr. Goode Cheatham, of Henderson, N. C., and admitted to Rex Hospital. His condition was hopeful: temperature 100 1-5, pulse 92, perfectly conscious and not suffering unduly. There was a wound in the right iliac region, on a level with the umbilicus and 5 inches distant from it, appearing to run in a direction downward and inward. No other evidence of injury was present. At 9 p. m., seven hours after the shooting, the patient was anesthetized and the abdomen opened in the linea alba just below the navel. A moderate amount of blood and a few clots presented. These were sponged out and a systematic search of the intestines instituted. The only perforations were in the cecum—a wound of entrance and one of exit—in a plane almost anteroposterior. A clamp being applied temporarily to these openings, the colon was lifted up and the condition of the appendix noted. The bullet track passed through the base of this organ and had torn it off, except where it hung by a slender strip of bowel wall. Its tip was also attached by old adhesions to the ileum and post-cecal tissues. (This is interesting in view of the history afterwards obtained that the man had been laid off duty for two weeks over a year previous on account of a severe attack of colic). The thread-like process holding the appendix was then snipped off with scissors and the opening thus left also clamped. The three perforations were then united after the Lembert fashion, using peritoneal investments wherever they could be obtained and employed to advantage. No trace of the further course of the bullet could be discovered after an arduous exploration. The abdominal cavity was flushed with hot saline solution and a gauze drain inserted and brought out at the lower angle of the skin incision, which was all but closed with en masse silk-worm gut sutures. The time consumed in the operation was about fifty minutes.

Equally as interesting as the operative findings was the subsequent course of the case. The convalescence was comfortable and at no time were there dangerous symptoms. The following notes are taken from the records of the first few days: August 20, gauze drain renewed; great abdominal distention; restless and in pain; urine muddy and bloody. Highest temperature 101 1-5, pulse 108. August 21, vomited yellowish offensive material; very restless; sediment in urine, but no blood. Hiccough; t. 100 3-5, pulse 92; three stools from high enema. This condition remained practically the same until August 27, when the distention had almost disappeared and the hiccough had gone. Then the patient was given light diet and was able to sleep all night. On September 2 the temperature began to rise, going up as high as 103 1-5 the next day. There was tenderness for several days in the right iliac and lumbar regions and signs of a mural abscess appeared around the

right margin of the wound. As soon as this was evacuated, the temperature descended and, save for an occasional slight rise, remained about the normal thereafter. The patient sat up in bed October 3. Nothing eventful then took place until October 10, nearly two months after the operation, when an astonishing thing happened. On that day at 6 a. m., while the man was on the commode, being the first time that he assumed the upright position, he passed the bullet from his rectum. No happier ending to a desperate case could have occurred. It is hardly necessary to add that everything was plain sailing after this and a permanent recovery was the final outcome. The patient was discharged on October 27.

In all probability there never will be a satisfactory explanation of the manner in which the bullet came to be discharged by the bowel. One of two theories might account for it: first, that the bullet, its force being spent, entered the bowel at the time; second, that the ball lodged in the tissues of the postcecal region and made its way into the bowel later. The bloody urine on the second day and the tenderness in the lumbar region on the thirteenth day may have been associated with conditions pointing strongly to the second theory mentioned above. At any rate, the termination is unique, as far as our information goes, and particularly in view of the fact that frequently missiles of this kind not only elude discovery at the operation, but are not heard from ever afterward.

8. *Anomalies of Position.*—LaPlace (4) states: "The appendix is not always located in the right iliac region. In very stout patients a certain degree of enteroptosis is present and this changes materially the location of the appendix. One may then find it in any part of the abdominal cavity, according to the particular location in which the ileocecal region has accommodated itself. Under these circumstances the location of pain becomes a very obscure matter. It may be found at any portion of the abdomen radiating in various directions."

A number of observers have found the appendix with the cecum entirely on the left side. Also, it may be of such a length that it reaches across the abdominal cavity. The appendix is occasionally seen in the contents of a hernial sac. Fowler (5) mentions an instance in which the appendix was strangulated in a femoral rupture without a previous history either of appendicitis or of hernia. Hemsted (6) records a similar case. Elder (7) operated on an infant of seven months and found a gangrenous, perforated appendix in the sac of a right inguinal hernia.

The only case of an abnormally located appendix I have encountered was in a very old colored man upon whom I operated seven years ago for a swelling in the region of the right crural ring. The condition proved to be a femoral hernia with the appendix and its mesentery as the sole occupants of the sac. The appendix was ligated, the bowel pushed back and the opening closed. There was no infective process or structural change in the appendix. One year and a half later the man died and I had occasion, in doing the autopsy, to confirm the former condition. The possibility of the appendix being involved in a strangulated hernia should never be overlooked.

202-203 Tucker Building.

REFERENCES.

1. Manton: American Gynecology, January, 1903.

2. London letter, Medical Record, December 20, 1902, p. 985.

3. Carstens: American Jour, Obstet., March, 1903.

4. La Place: American Jour. of Surgery and Gynecology, January, 1903.

5. Fowler: Treatise on Appendicitis.

6. Hemsted: British Med. Jour., December 8, 1900.

7. Elder: Montreal Med. Jour., March, 1901.

Management of Injuries to Fingers and Hand.*

By D. A. Stanton, M. D., High Point, N. C.

In choosing this subject as a basis, I am aware that the ideas of physicians are as varied as the character of injuries inflicted, yet all tending to the same end and in due time each one has success.

I reached the conclusion which guides me in this class of surgery from an observation of twelve years practice in a town having over forty wood working concerns, so my material for experimenting has not been limited and I have tried to profit, both to my patients and myself by the vastness of the accidents.

The chief object to keep in view in injuries to the fingers and hand is to economize as to the amount of member to be sacrificed and to minimize time to the patient.

To amputate every mangled finger is a mistake which has too often been made by every one doing this class of work. It is remarkable what reproductive power and fingers have, an injured finger that at first appearance could not be saved, will by proper care, recover into a useful member. Unless the joint is disorganized the member should be left. No amount of flesh destruction should deter the surgeon; the smallest amount of periosteum left, with a flesh covering will soon be reproduced in a useful finger. One common mistake is the tying of arteries in surgery of the fingers and hand, this should never be done, not even if the deep arch is involved in the injury, torsion and pressure is all the hemostatic need. A ligature buried in the finger or hand will act as a foreign substance and prevent union so long as it remains there. The power to absorb ligatures in this part of the body does not seem to be equal to that of any other part of the economy.

No more stitching of the skin should be done than is necessary to approximate the larger pieces of skin and flesh.

A thorough cleansing of the part with sterile water is the best antiseptic. Antiseptic surgery is nothing more nor less than clean surgery, and while there are occasionally cases that require green soap, turpentine and even bichloride of mercury to render the part clean, but as a rule a sterile salt solution is all that is needed. I have primary union oftener where I use only salt solution than where I use bichloride solution.

After cleansing the mangled member all tags and shreds of skin and flesh should be trimmed off with the scissors and as few stiches as is necessary to approximate the edges of the wound put in.

After preparing the injured member in the manner stated, wrap the part loosely with sterile gauze and keep moist for forty-eight hours with some antiseptic solution. The one I have learned to like and am in some degree partial to is bovinine one dram to two

*Presented to the Tri-State Medical Association (Virginia and the Carolinas) at the Asheville Meeting, Feb. '03.

ounces of camphor water. At the end of forty-eight hours remove the dressing and you will find a clean, healthy wound, all bleeding stopped and the dressing having kept moist it will come off without any pain or disturbance of the wound. After this irrigate again with sterile water, dry and dust with any antiseptic powder. Boric acid, acetanlid and aristol equal parts is as good as any. If there are stitches to be removed let this last dressing remain undisturbed for six days, at which time you will find the wound healed; remove the stitches and dress with dry gauze and do not disturb the part again.

If the injury does not require stitching, after a thorough cleansing apply a very thin layer of absorbing cotton and saturate this with flexible collodon, wrap loosely with gauze bandage and do not disturb for a week, then the injury will have recovered.

The most frequent error committed in this department of surgery is the too frequent change of dressing; unless there is suppuration, and that will not often occur under the manner stated above, the dressing should not be tampered with for a week after the first forty-eight hours.

Another method as to dressing, which so far as I know is original with me, is by the muzzle method, as I call it for want of a better name. When the injury in the finger requires either amputation or the near approximation of the skin, cleanse the part and put nothing except a dry powder on the wound, encase the hand in the wire muzzle, which I have devised and here show you. Over this place gauze of four layers, over this spread a sheet of guttapercha and cover well with roller bandage. By this method the hand is protected from all external agencies and the injured member from all pressure of bandages which is often difficult to remove and do injury to the wound.

Under this plan nature can form and take care of her own dressing and the time of repair is lessened very much.

Surgery of the Hand.*

By W. J. McAullay, M. D., High Point, N C.

With the great increase of manufacturing enterprises in the Southern States there is in the natural course of events a corresponding increase of injuries to the hands of those who toil in the growing and increasing manufacturing plants. And the railroads with their greatly increased pay rolls and unprecedented amount of business have unavoidably been sending their quota if men to us for repairs.

And as these noble sons of toil bring to us their rough and corny members mangled and bleeding, cut, mashed or sawn asunder, we can but feel a thrill of pity, and as these privates from the ranks of our growing industrial army turn in their weapons for repairs there is always a strong desire, or should be a strong desire to save every particle of these useful hands that is possible to save. And often attempts to save parts of the hand are successful beyond our most sanguine expectations.

The powers and possibilities of repair are so great in the hand that we may expect almost anything to be repaired. Fingers and thumbs cut entirely off may be replaced and saved and often when mashed almost to a pulp they may be saved. The bones may be severed and an inch or more of the bone between joints may be torn out or splintered up and yet even with

---

*Presented to the Tri-State Medical Association, at the Asheville meeting, Feb. '03.

all important arteries cut this finger can be made useful. But to say these things to this body of men may evince simply the desire to say something. But I say them to show my own faith in the hand's powers of repair. And actuated by this faith in its powers of repair I wish to state some results attained from work done along this line and especially to emphasize the value of a moist dressing for the first 3 to 4 days after injury. To simply outline my plan it is this: Take a hand cut to pieces and fingers dangling about and covered with blood. If the injury is done by a wood working machine or anything that is reasonably clean, the spicula of bone are removed after I have thoroughly washed my own hands and instruments in carbolic solutions. The fingers where the joints are too badly injured are removed at the last injured joint. The strips and ends of skin are then stitched into the best position and without any washing or antiseptic solutions or powders whatever the parts are wrapped in sterile gauze, blood and all together. This blood is an ideal dressing and helps to bind the severed parts together and saves stitches often. The dressings are now wet and kept moist from 3 or 4 days with a solution of Phenol Sodique 40 parts, Listerine 40 and Laudanum 20. Not one time in 40 will it be necessary to remove these dressings in less than a week. There will be no congestion or pain but the parts heal rapidly. Usually the dressings are removed in 7 to 10 days and the stitches taken out. Then a dressing of Balsam Peru 25 parts, Ichthyol 10 and Castor Oil 65, is applied on gauze. Any surface of much size not covered with skin is now covered with silver foil, because to put gauze on a large granulating surface will certainly produce a noisy time at the next dressing. Of course if the hand is injured by some rusty machinery or dirty timbers I then scrub the injured parts and use antiseptics and wash away all blood so no nidus is left for the production of bacteria. But the hand can take care of a few pathogenic bacteria any way and unless the injury is known to have been done by some unclean thing I do not wash it. All the washing won't remove all the germs any way and certainly any washing with antiseptics does much injury to the parts. The best wash I find to be sterile water. I don't believe I have congestion and pus formation from infection in 5 per cent. of my cases treated this way.

The Bureau of Chemistry, of the Department of Agriculture, has grown to be one of the most important in the whole service. There are now eight laboratories, each with its distinct and well-defined field of labor. These are foods, sugar, dairy products, fertilizer, soil analysis, road materials, insecticides and agricultural waters and dendrochemical or aboreal studies. Among the most comprehensive studies attempted by the Bureau are the effects of environment on special plant growths, such as sugar beets and wheat, especially valuable in the introduction of foreign types. Quite as valuable is the work to determine the fertilizer requirements of plants and the means of determining these by chemical analysis, a study that obviously could only be carried out under unprejudiced governmental control.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

SELECTED PAPERS.

The Surgical Treatment of Anuria.

In a paper read before the Chicago Surgical Society, Dr. A. D. Bevan reports an extremely interesting case of anuria, which he succeeded in relieving by surgical means. The patient, a man, 23 years of age, presented himself at a hospital on August 1, 1902. He had passed no urine for six days. He gave a history of repeated attacks of pain in left kidney for the past ten or twelve years, and for the past four or five years had noticed a fullness in left lumbar region. A short time before coming to the hospital, he had begun having pain in right side, which was more or less continuous. On entering the hospital his condition is thus described:

"Consciousness is retained. Patient is a young man; well developed; well nourished. Face slightly pale. Pupils equal on the two sides, and moderately dilated. Vision is normal. No disturbance of any special senses. Heart and lungs appear normal.

"A fluctuating tumor is situated in the left lumbar region, extending from the last rib to the crest of the ilium. It appears to be retroperitoneal, since there is tympany upon percussion over the tumor anteriorly. Distinct tenderness upon pressure over course of right ureter. Distinct rigidity of abdominal muscles, especially on right side. Upon catheterization, no urine came from the bladder. Examination otherwise negative. The patient is able to walk about; does not give the appearance of being seriously ill, and has no symptoms of uræmia."

Three hours after admission, a lumbar incision was made on left side and a large hydronephrotic sac was found and opened, allowing the escape of three or four pints of fluid. A rubber tube was placed in pelvis of kidney. A large amount of blood-stained fluid escaped upon the dressings, but as repeated examination showed the fluid to contain a very small amount of urea, from .2 to .3 per cent., and no urine appearing in bladder, it was decided to make an incision over the right kidney. This was done twenty-four hours after the first operation. The right kidney was about twice natural size and contained 8 or 10 ounces of a urinous fluid. A similar drainage was applied as in left side, and the fluid then showed 1.5 to 2 per cent. urea. No urine was passed from bladder until 10 days after operation and then only very small quantity. Methylene blue was given by the mouth and dressing on righ side showed stain in 40 minutes—no blue stain on left side. The patient did well, general health being excellent, but urine was still passed almost entirely from right lumbar incision three months after operation. An effort was then made to find and relieve the obstruction to flow of urine from right kidney. The fistulous tract was enlarged and a small sound passed down the ureter into the bladder without meeting any obstruction, although the ureter seemed much contracted. Four or five weeks after this operation patient began passing most of urine through the bladder, and some weeks later on leaving the hospital the wound on right side closed completely. Small tube was kept in left side, but discharge was very slight. In spite of the three operations and repeat-

ed examinations by means of X-rays, no stone of other cause for the obstruction in either side was located.

As a result of his experience in this case, Dr. Bevan has made a thorough study of anuria and its surgical treatment, and his statement of the present day methods of dealing with this generally little understood subject will prove interesting and instructive:

Total suppression of urine occurs:

1. From mechanical obstruction of the ureter of the single functionary kidney of an individual, the other kidney either being congenitally absent or destroyed by previous disease.

2. From mechanical obstruction of one ureter in an individual possessing two functionary kidneys, with increased intrarenal pressure on the obstructed side, which by reflex nerve action prevents the unobstructed kidney from functionating, the so-called reflex anuria. Or, possibly, after a nephrectomy the involvement of the nerves in the pedicle may produce a reflex anuria.

3. From trauma of both kidneys, which, for a time or until fatal issue, is followed by complete cessation of function; also from trauma of a single kidney, which apparently by reflex action so affects the uninjured kidney that complete anuria results.

4. From acute nephritis, as sometimes seen in scarlet fever and other forms of septicæmia.

5. From destruction of practically all kidney tissues as the result of such chronic leisons as tuberculosis, cystic degeneration, etc.

6. From certain poisons, as phosphorus, lead and turpentine, ether, chloroform, etc.

7. From the peculiar condition known as urethral fever, commonly the result of the passage of a catheter or sound.

8. In the polymorphous symptom-complex, known as hysteria, anuria may occur.

Anuria is a condition. It is not a disease *per se*. Until within the last twenty years, indeed, one might almost say until the last ten years, the condition has been discussed merely as a symptom occurring in a number of diseases, which usually marked a fatal termination, and for which little could be done by the medical attendant. Within the last twenty years, however, so much light has been thrown on the subject by Tuffier, Morris, Israel, and others, and so much good has been accomplished by intelligent surgical interference, that today the condition of anuria is entitled to be placed, I believe, in the same class as the condition ileus, as one of sufficient importance to be considered and handled as a surgical entity.

Such a consideration of the subject is of special value from a clinical standpoint, because in the majority of cases, or at least in those cases in which interference holds out any prospect of relief, the anuria is the important overshadowing condition with which we have to deal. It is *the* condition which menaces the life of the patient. It is *the* condition which is evident, even though the exact cause of the obstruction may not be clear; and it is *the* condition which must be relieved in order to save the life of the patient.

It shall be my effort in the present essay to discuss the subject of anuria in somewhat the same way as we do ileus, and attempt to present a working classification which shall be useful at the bedside as a means of determining our line of interference or action.

The clinical classification which I would suggest is the following:

ANURIA.

1. *Obstructive.*

(*a*) Obstruction to ureter of single functionary kidney. This is the most common form.

(*b*) Obstruction of both ureters practically simultaneously. This is very rare from stone; more common from extramural pressure, as carcinoma of uterus.

2. *Reflex or Paralytic.*

(*a*) Obstruction of one ureter, increased intrarenal pressure of this side, which, by reflex action, suppresses function on the other side.

(*b*) Removal of one kidney and, by reflex action, from injury to nerves in pedicle; suppression on the other side.

(*c*) In this group can fairly be included the rare cases of hysterical anuria.

(*d*) Traumas of kidney or kidneys.

3. *Non-Obstructive or Nephritic.*

(*a*) From nephritic, as after scarlet fever.

(*b*) Anæsthetics; ether, chloroform, etc.

(*c*) Poisons, as phosphorous, turpentine, etc.

(*d*) Poisoning by toxins in various general diseases, as cholera.

(*e*) Urethral fever, which, as an acute septicæmia, may produce suppression, or possibly, by reflex nerve action, produce same result.

(*f*) Lesions gradually destroying first one and then both kidneys, as tuberculosis, cystic degeneration, etc.

A clear differentiation should be kept in mind between anuria and uræmia. Anuria is a suppression of urine; merely a condition, not a disease. Uræmia is a disease, a toxæmia, developing from a nephritis, or in the course of an attack of anuria.

That uræmia is not due simply to the suppression of urine is clearly shown by a study of the cases of obstructive anuria where patients continue in fair condition for a week, or even two weeks, without a symptom of uræmia developing. Patients with total suppression have lived twenty-five days after the onset of the attack, whereas, as is well known, uræmic patients seldom live more than three days after the beginning of an attack, with total suppression.

Uræmia is usually the cause of death in anuria, but may not develop at all in the cases which recover either spontaneously or are relieved early by surgical interference.

In the first two groups of our classification, *i. e.,* obstructive and reflex anuria, uræmia is not an essential part of the picture. In the third group, non-obstructive or nephritic cases, uræmia is an almost constant accompaniment.

Let us consider these three groups in the order named, and study the pathology, symptoms, course, termination, and treatment.

1. *Obstructive Anuria.*—Here the pathological anatomy reveals at operation or post-mortem, in the great majority of cases, a single functionary kidney, the other kidney congenitally absent, or recovered by previous operation, or destroyed by previous disease. The ureter of the single functionary kidney is obstructed by stone, blood-clot, pus, masses of crystal of uric acid, cystin, etc., by kink in ureter, by valve-like action of ureter, with oblique insertion into pelvis, by extramural pressure, as from carcinoma or fibroma of uterus or abscess in pelvis or abdomen.

The simultaneous obstruction of both ureters with resulting anuria is rare.

The symptoms are usually pain of the character of a renal colic, on the side last obstructed, followed by anuria accompanied by tenderness over region of

kidney and ureter, and muscular rigidity on that side, sweating, seldom of uriniferous order. In a number of cases, but by no means constant, physical examination determines the presence of an enlarged kidney on the affected side. This is often difficult to determine before anæsthetic because of the muscular rigidity. The general condition of the patient is often surprisingly good; no temperature, no increase of pulse-rate, and, as in my case, the patients often walk about and eat and drink and present to all outward appearance almost a normal condition for a number of days after the onset of the attack. Usually by the seventh or eighth day uræmia symptoms appear, although, as noted, these may be postponed for two weeks or more, and then the patient, if not relieved rapidly, succumbs to the toxæmia. In many cases where the opposite kidney has been destroyed by previous disease, a history of symptoms pointing to this fact can be elicited, or, as in my case, where this previous disease has resulted in a hydronephrosis, this fact may be elicited by the physical examination. Sometimes, however, the onset of the attack is not marked by any acute symptoms, but comes on insidiously, and again may come on very acutely, but without any previous history to aid in the diagnosis.

The most common picture in calculous anuria is quite clear. A history of repeated renal colic on one side, which results in destruction of that kidney as a functionating organ, and then later renal colic on the other side, with resulting anuria.

The indications for treatment in obstructive anuria are clear, distinct, and imperative, *i. e.,* a nephrotomy on the kidney last attacked, not later than forty-eight hours after the onset of the symptoms. The pain, tenderness, and muscular rigidity usually point clearly to the side to be operated on.

Such nephrotomy meets the vital indications. It furnishes an outlet for the urine; it enables us to remove the cause of obstruction, if in the kidney or pelvis, and by division of the kidney tissue and bleeding relieves the congestion, which, although a result of the obstruction, is a condition which, if it continues, of itself prevents the secretion of urine. Such a nephotomy can be rapidly done, probably safest under nitrous-oxide anæsthesia. Prolonged operations, such as removal of stone from ureter, or plastic work on the ureter, should not for a moment be considered at the first operation, but should be postponed until the patient has been relieved of the anuria and brought into fairly normal condition, when it can be more intelligently and safely performed.

Israel quotes statistics giving 66 per cent. of recoveries after operation, and but 28.5 per cent. without.

Morris gives 51 per cent. of recoveries from operation and 20.8 without.

It is to be remembered, however, that many of these operated cases were allowed to go unrelieved for a week or more; and it is quite certain that, if the cases were operated on by the end of forty-eight hours, the recoveries would exceed 75 per cent.

A nephrotomy is to be regarded as the operation of choice, instead of an ureterotomy or incision into the pelvis, because it is easier of performance, can be more rapidly done, gives a freer access to kidneys and pelvis, and relieves the congestion.

If, at the time of the nephrotomy, the surgeon finds that he has operated on the wrong side, as has occasionally happened, he should at once operate on the other side, unless, as in my case, there is fair ground for believing we have a

reflex anuria to deal with, and that relieving the pressure in an old non-functionating kidney may relieve the reflex anuria. If, by the next day, however, this hope has not been realized, a nephrotomy should be made on the opposite side.

2. *Reflex Anuria.*—The existence of reflex anuria has been denied by a number of observers. Personally, I have been very sceptical on this point, and doubted the existence of this condition. I am quite positive that many of the reported cases of reflex anuria have been pure types of obstructed anuria, and the cause of the obstruction not found at the operation, or even post-mortem. On the other hand, a careful review of the reported cases, and especially the experimental work of Dr. Arthur Gotzl, one of Israel's students, has convinced me of the existence of such a condition. Gotzl showed by experiments on dogs that, by increasing the intrarenal pressure in one kidney, he could lessen and even completely suspend the secretion from the other.

This question is of great importance in determining the treatment of a case, *i. e.*, in deciding upon which side we shall make our nephrotomy.

Theoretically, in operating on a case of reflex anuria, we should leave the sound kidney, and operate on the side which is diseased, and which by reflex action has inhibited the secretion of the other, the sound, organ; and in some cases this plan has been successful in relieving the anuria, as shown by a number of cases where a hydronephrotic kidney causing reflex anuria has been incised or tapped, relieving intrarenal pressure, and this followed by resumption of function by the other kidney.

Practically, the question presents a difficult problem, because the diagnosis of reflex anuria is never to be made at the time of operation with any degree of certainty. In those cases where the pain, tenderness, and muscular rigidity are confined to one side, and on operating on this side a non-functional kidney is found, and intrarenal tension relieved, we may hope that we have a reflex anuria to deal with, and that this procedure may restore the function on the opposite side.

However, if within twenty-four hours our hopes are not realized, a nephrotomy should be made on the other kidney.

In the anuria from trauma we have a composite and complicated picture. Here both kidneys may be injured and cessation of function result, either from nerve injury or injury to blood vessels, or rupture of both kidneys and extravasation of urine into the perirenal spaces or into peritoneum. Or we may have but one kidney injured and anuria result from reflex suppression of the other side.

The line of action to pursue must be controlled by the major symptoms present.

A case where anuria is but one of the results of surgical shock, without gross injury to the kidneys, is to be handled by salt solution, per rectum or subcutaneously. A case where anuria is the direct result of gross injury to kidney or kidneys should be operated on, kidney drained, and hæmorrhage controlled. Probably this had best be done under nitrous-oxide anæsthesia.

3. *Non-Obstructive or Nephritic Anuria.*—Non-obstructive or nephritic anuria has been generally regarded as strictly a medical condition, one which occurred in the course of profound and fatal uræmias, and for which surgery held out no hope.

Within the last few years, however, since operative treatment has been suggested and tried in both acute and

chronic nephritis (*i. e.*, splitting the fibrous capsule and stripping the fibrous capsule from the kidney) and nephrotomy, a number of cases of nephritic or non-obstructive anuria had been submitted to operation.

The reasoning on which such treatment is based is the following: The congestion of the kidney present in these cases, although a result and not the cause of the cessation of function, is, nevertheless, a factor in preventing secretion; and if by a surgical operation, as nephrotomy, this congestion could be relieved, secretion might be resumed, and the patient go on to recovery. The position seems logical, and a number of clinical results seem to support it. Such treatment is, however, to be regarded as, as yet, distinctly experimental, and not to be indiscriminately advocated and employed.

The conclusions from this short study are:

1. The clinical importance of recognizing the three forms of anuria—obstructive, reflex, and non-obstructive—is to be emphasized.

2. The imperative necessity of surgical interference in the obstructive and reflex forms, and its possible value in the non-obstructive cases.

3. That in the first two varieties, at least, a rapid nephrotomy on the side of pain, tenderness, and muscular rigidity is the operation of choice. If necessary, do not hesitate to make a double nephrotomy.

4. That nitrous-oxide anæsthesia is probably to be preferred.

5. That time-consuming operations to relieve permanently the obstruction are to be postponed to a later period, after the patient has recovered from the anuria.

6. Operate early by the beginning of the third day.

See page 255 for an attractive proposition to all our subscribers. We consider it the best offer we have ever been able to make our friends.

NEWER MATERIA MEDICA.

Iron as a Remedy.—Time out of mind, iron has been leaned upon, as one of the special standbys in medicine, particularly as a builder and reconstructor. But unless Iron be given in proper form, one might as well give absorbent cotton, or chips or wet stones. When we desire to produce any increase in the number of red blood corpuscles, and to make them redder and richer with hemoglobin, we need to be sure of the form of iron that we are giving. The evidence has been accumulating these many years, that Manganese, in itself an admirable remedy, combined with Iron emphasizes the potency of both.

Dr. Gude, the great German chemist, contributed very definitely to the good of the profession, when he presented the product of long years of experimentation, and clinical experience, the Therapeutic product known as Pepto-Mangan (Gude).

Added to the many hundreds of clinical contributions, Dr. J. W. Frieser, of Vienna, Austria, recently reports most favorably, and very forcibly, observing as follows:

"Pepto-Mangan contains Iron and Manganese combined with Peptone in the proper proportions, and in a readily digestible and absorbable form, so that

the preparation can be completely utilized by the organism. As is well known, the peptones represent artificial predigested products, which when taken into the organism make no special demands upon the digestive functions, which in anæmic and chlorotic persons are usually weakened and impaired in action. This fact is the more important, since in these cases, the digestive process and the secretion of gastric juice is usually reduced, in consequence of which the nutrition is quite impaired, while frequently there is a condition of hyperacidity of the gastric juice. It has been most gratifying to me to observe that during the use of Pepto-Mangan (Gude), which experience has taught me is particularly adapted in these maladies, it does not interfere with, or exert any disturbing effect upon the digestion. On the contrary, under its administration, the appetite and the digestion are stimulated in a very satisfactory manner.

"As a rule, during treatment with Pepto-Mangan the improvement in the constitution of the blood, as shown by physical examination, was accompanied by a beneficial effect upon the general condition and strength. The appearance and appetite of the patients improved visibly; the digestion and nutrition progressed favorably, and the patient felt better, happier and more vigorous. Disturbances of the gastro-intestinal tract, such as pressure or pain over the stomach, nausea, a disagreeable feeling of dullness, a diminution of appetite, constipation, congestions, etc., which are so frequent during the administration of other iron preparations, especially those of inorganic character, were scarcely ever observed during the use of Pepto-Mangan (Gude). On the contrary, in those cases in which there is a tendency to constipation, and a marked atony of the gastric functions my experience has led me to regard this remedy as especially useful and effective."—*Editorial, Medical Mirror.*

In those poor victims of a pernicious "pepsin habit" where the stomach instead of being encouraged to do its normal work, has been allowed to become a lazy inactive member while an artificial digestant did the work, I find Seng a boon. Step by step it seems to lead the faltering gastric functions, until before the patient is aware of it, he loses the unhappy knowledge that he has a gastric apparatus. In subsente or chronic digestive disturbances, I know of nothing which equals it.

Will A. MacKenzie, M. D.
St. Louis.

I have weighed Peacock's Bromidia in the balance and not found it wanting as a most efficient remedy for the prompt relief of all nervous excitement, epilepsy, uterine and cerebral congestion, hysteria, neurasthenic and, in fact, any convulsive or reflex neurotic derangement. It can be depended upon always.

Alfred R. Schoenig, M. D.
Billings, Me.

The action of Celerina on the brain and nervous system is that of an exhilarant, relieving depressions, and lessening irritable nerve conditions. In cases of organic and functional lesions of the heart, an increased steadiness of pulse beat, and diminution of pulse variation is apparent.

Merit and Reliability With Consequent Success.—We are advised that our old friend, "The Antikamnia Chemical Company," for many years located

at No. 1723 Olive street, St. Louis, Mo., has moved into its new home, Nos. 1622-1624-1626 Pine street, in said city. The new laboratory is fully equipped with all the latest chemical apliances and machinery, which afford increased and needed capacity for the manufacture of the well-known and reliable Antikamnia preparations. The company's sales during 1902 were the largest in the history of their business, and that the demand for their products is constantly growing, is demonstrated by the fact that the first three months of this year show a pronounced increase of sales over those of the corresponding months of last year. In fact, it is the growth of the business which necessitated the removal into larger quarters, where the company has 75 per cent. more space than in its old plant. The steadily growing esteem in which the Antikamnia Chemical Company's products are held, by the medical profesion throughout the world, is due to the well-known merits of the original Antikamnia Tablets and Powder, as well as to the undoubted remedial efficacy and pharmaceutical excellence of the new combination tablets which this company has, from time to time, added to its line of specialties.

Pain and Its Remedy.—(By J. D. Albright, Philadelphia, Pa.)—Believing that the bar in the way of the profession, in the use of opium, is its tendency to evil after-effects, and the harum-scarum idea that a little opium will induce the habit, and those terrible concomitants (?) I wish to call their attention to a preparation that I have long been using, and have not yet seen one case in which the habit was formed, nor ever had any complaint as to evil after-effects. This remedy is papine, a preparation of opium from which the narcotic and convulsive elements have been removed, rendering it a safe remedy for children, as well as for those of mature age. . . . . Up to a year ago I always gave chlorodyne tablets and viburnum for after-pains. Then I came across a case that refused to yield to them in the time I was accustomed to have them do so, and I concluded to try papine. Its results, to make the story short, were such that I now never give anything else for after-pains, and they yield in about half the time that was required with the above-named remedies.—*Medical Summary.*

"Robinson's Lime Juice and Pepsin" is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. (See page 251, this issue.)

Acetozone in Gastrointestinal Disease.—(By W. F. Drake, M. D., New York.)—Case I.—A. B., 56 years of age, was brought to me suffering from gastrointestinal catarrh and chronic colitis, which had lasted for six years. For a long time he had been treated with high enemas of salol, resorcin, and the like, but without benefit. Finally, I determined to try acetozone, of which I gave him a quantity of the 1-1000 solution after meals, with instructions that the colon should be irrigated daily with normal salt solution. Under this treatment a marked improvement was manifested in a few days; the flatulency disappeared and the patient suffered absolutely no pain. Prior to the exhibition of acetozone his heart's action was very irregular, but it now became perfectly normal. The acetozone treatment was continued for about six months when the patient was discharged. He still continues to use enemas of salt solution,

once a week, and takes a dose of cascara evacuant as a laxative, occasionally. None of the former distressing symptoms have returned.

Case II.—C. D., 34 years of age, after suffering from acute catarrhal appendicitis, for which the usual treatment of ice bags and high enemas had been employed, made a fairly good recovery. He afterward suffered from intestinal fermentation, accompanied by flatulency, tenderness in the region of the appendix, very irregular heart's action, mitral regurgitation, severe sick headache, foul breath, and a heavily coated tongue. I prescribed 30 drops of cascara evacuant each evening as a laxative, and the acetozone solution after meals. After three months of this treatment the patient was discharged cured.

In the treatment of leucorrhœa vaginitis, gonorrhœa, etc., a most efficient prescription is as follows:

℞ Lue-kre-tol.....3ii
Hot Water.....Qt. i

Flush the the parts one to three times daily. Send for sample to Luescreton Chemical Co., Winston-Salem, N. C.

Sanmetto in Chronic Cystitis, Chronic Urethritis and Pre-Senile Impotence.—To whom it may concern: This is to certify that I have used Sanmetto extensively in my practice and can recommend it in chronic cystitis and chronic urethritis. I have used it in pre-senile impotence with remarkable and brilliant results. I regard the remedy, after making crucial clinical tests in the above named diseases, as the *sine qua non* of all the remedies in these diseases.

THOMAS M. BROWN, M. D.
Oakland City, Ind.

Sanmetto in Frequent Incontinence in the Aged, in Enuresis Nocturna in Children and in Pre-Senility.—I have had good results from the use of Sanmetto in nocturnal enuresis of children; also have prescribed it in cases of frequent micturition in old people, with marked benefit; also find it beneficial in pre-senility. I think it is a good medicine in all cases where anything of its nature is indivated.

S. W. BADGER, M. D.
Athens, Pa.

REVIEW OF MEDICAL AND SURGICAL PROGRESS.

Conclusions Regarding the Efficacy of Acetozone in Typhoid Fever.—Dr. F. G. Harris, resident pathologist of Cook County Hospital in a paper published in the *Therapeutic Gazette* of March, recapitulates, after a study of the drug in the treatment of 128 cases of typhoid in the wards of Cook County Hospital, as follows:

The average stay in the hospital of the 128 patients was 31.04 days.

Of the whole series of 128 cases, 117 made good recoveries, or 91.4 per cent., while 11 died, or 8.59 per cent.

Statistics of the cases of typhoid fever in the hospital not treated with acetozone show a death-rate of approximately 13.1 per cent.

In strict justice to the test—that is, acting in the spirit of this experiment—which was to ascertain the value of the new drug in the treatment of typhoid

fever, 6 deaths should not be counted for or against the drug. This would change the death-rate of the 123 remaining cases to 4.87 per cent., which will be conceded to be unusually low.

In two years' experience in this hospital I have seldom seen typhoid patients discharged recovered in less than six weeks, whereas under the acetozone treatment many left the hospital recovered in four weeks or less; the average sojourn for the 128 cases being slightly more than twenty-eight days.

The time-honored aphorism, "Typhoid fever must run its course of five or six weeks," did not hold good in this series of cases.

Under the acetozone treatment in favorable cases (seen early) the duration of the disase has been materially shortened, and the most disagreeable symptoms ameliorated.

The typhoid fetor of the stools and the peculiar odor of wards containing typhoid patients are greatly lessened.

The stupor and delirium were very much less, tympanites less frequent, and diarrhœa was checked.

The temperature was reduced; the nurses uniformly commenting on their lightened tasks when caring for typhoid cases under the acetozone treatment.

Forty ounces of the drug was used in the test, being an average of 138.12 grains to each patient.

Many patients were given acetozone very irregularly on account of many contributory causes: dislike of the taste and odor of the solution; resistance of ignorant patients; lack of persistence on the part of overworked attendants, due to the crowded wards caused by the epidemic.

Those patients who are given the drug early, often, and regularly show the best results of this treatment.

What Virchow calls the "brutal force of figures" cannot but convince any one that acetozone lowers the temperature, shortens the duration of the fever, and lessens its toxic symptoms more than our better known treatments.

From the information gained in watching this series of one hundred and twenty-eight cases of typhoid fever, I believe that where cases can be seen during the first week of the illness and given large amounts of acetozone solution regularly and often, assisted by a gentle laxative, the temperature will return to the normal in from ten to twelve days.

An Experimental Research Into the Value of Adrenalin as a Stimulant.—To the Cleveland Medical Journal for December, 1902, Miles and Muhlberg contribute the results of a research upon this very valuable medicament. Keeping in mind the fact that deductions drawn from animal experimentation are valuable only in so far as they are very suggestive when applied to human beings, they draw the following conclusions from their experiments:

1. Adrenalin may be of value in cases of so-called heart failure occurring during anesthesia, especially when the ordinary heart stimulants, such as strychnine, digitalin, and normal saline solution, fail.

2. That it is more likely to succeed in those cases in which the respiratory centers are not paralyzed, since adrenalin does not appear to be a very powerful respiratory stimulant.

3. That when used, it should be given subcutaneously, and the site of the injection should be slowly but strongly massaged until the adrenalin shows its characteristic effect on the pulse.

4. That dilution with normal saline solution (10 per cent, of the 1-1000),

by making absorption slower, causes a more prolonged and a less energetic rise of the blood-pressure.

5. That while these experiments do not permit them to draw any conclusions in regard to bad after-effects, these were not observed in the animals experimented upon. The danger from secondary hemorrhage as a result of the high pressure must, however, be borne in mind.

6. Adrenalin subcutaneously is indicated on theoretical grounds for the vasomotor collapse following cocaine or chloroform poisoning, and possibly the shock after operation.—*Ther. Gazette.*

Would it not be a wise procedure to use adrenalin with cocaine to shield the patient from the danger of cocaine poisoning?—*Ed.*

Conclusions Regarding the Irrigation Method of Treating Acute Specific Urethritis.—In a paper read before the Philadelphia County Medical Society on February 11th, Prof. Orville Horwitz, after quoting from various authors and his own experience concludes:

"Any one with a mind unbiased who will analyze the testimony offered both for and against the irrigation treatment of acute specific urethritis will, it is believed, feel justified in subscribing to the conclusions which follow:

1. The irrigation method of treatment will not abort acute specific urethritis.

2. It will hasten the terminal stage of the disease, which is prolonged and difficult to cure.

3. Chronic urethritis and involvement of the deep sexual organs are common sequences.

4. In many instances, in order to effect a cure in the terminal stage of the disease, the irrigations must be discontinued and other methods of treatment employed.

5. Irrigation should not be employed in the acute stage of specific urethritis.

6. Irrigation of the deep urethra by means of hydrostatic pressure is injurious in the majority of cases of acute gonorrhœa, and is conducive to the development of complications.

7. Little or no progress has been made in the treatment of acute urethritis either in aborting the disease, lessening its duration, or preventing complication."

Absorbable Ligatures and Sutures.—A perfect material for this purpose is something greatly to be desired. Surgeons, at the present time, have various methods of preparing their favorite materials, but as yet it cannot be said that any one substance or any one plan of preparation has received universal acceptance. On the whole, however, catgut bids fair to eventually supercede the other materials used in surgery as sutures and ligatures. Its chief defects as ordinarily used, are a too ready absorption by the tissues and the want of an ideally perfect method of sterilizing it.

Most careful experiments have recently been made with iodized catgut, and the results of the investigations, extending over a year, seem to indicate that in this method of treating catgut, we have an easy and sure way of rendering the material sterile and at the same time not interfering with its strength or absorbability. Dr. Nicholas Senn, of Chicago, in the *Journal of the American Medical Association*, says of iodozed catgtut:

"It was found that a 1 per cent. aqueous solution of iodin destroys the spores of the anthrax bacillus in eight days. The many experiments made by Clau-

dius demonstrated that it requires seven days for the complete sterilization of catgut in this solution. He also ascertained that the iodized catgut is not only absolutely sterile, but at the same time strongly antiseptic. Imbedded in a solid nutriment medium infected with pyogenic microbes the iodin contained in the catgut inhibited the growth of germs some distance from the threads.

"The following directions for the iodization are given: The commercial, raw catgut without any preliminary preparation is wound on a glass roll, two strings tied together to each roll. The disinfection is effected by immersion in a 1 per cent. solution of iodin. The solution is made by dissolving one part of iodin and one part of potassic iodid in one hundred parts of water. The solution is prepared by dissolving the potassic iodid in small quantity of water, to which the iodin, finely powdered, is added and the concentrated solution is then diluted to 1 per cent. The solution and catgut are kept in a bottle with a wide mouth, which is closed with an accurately-fitting glass stopper. The date is written on the label of the bottle. After eight days the catgut is ready for use and is preserved in the same bottle and same solution. Before using the catgut it is immersed on the glass roll in a 3 per cent. solution of carbolic acid or an indifferent sterile fluid for the purpose of removing the iodin from the surface of the threads. The threads are cut in the carbolic acid solution as they are needed. The catgut not used during the operation is returned into the bottle, thus doing away with any unnecessary waste of material. Catgut thus prepared is pitch black, soft, pliable and almost as strong as silk. The knots are firm and not liable to slip.

"According to the size of the catgut its removal by absorption takes place in from twelve to sixteen days, being a little more durable than alcohol catgut. It does not irritate the tissues, as the free iodin is soon converted into potassic and sodaic iodid by chemical combinations formed with the salts of the tissue fluids."

It is further claimed for iodized catgut that the iodin is disseminated into the tissues for some distance around the sutures, with the result that stitch abscesses are almost entirely prevented.

The Chief Cause of Sterility.—President Roosevelt has recently created quite a commotion by his letter on the increasing sterility of American women, based upon the presumption that it is chiefly voluntary. This is not true of Roman Catholic and Jewish women—taken as a whole—though it does apply to many Protestants; but the truth is the chief trouble is the alarming, terrible spread of gonorrhea. Any gynecologist of wide experience will corroborate this. *Philadelphia Medical Journal* of January 31, says: "There has occurred of late a marked reaction in the accepted belief as to the etiology of sterility in women. It was formerly the rule to ascribe the larger percentage of sterile marriages to ante flexion of the uterus with accompanying cervical stenosis; to enforced sterility from the use of shields; to some obscure change resulting from the higher education of women; to syphilitic endometritis; and to some sexual incompatibility between the man and the woman. There is not a shadow of doubt that all these, and other factors not mentioned, have a share in the production of sterility in some of its forms. It is now very generally recognized, however, that while "chercher la femme" is an excellent adage for one's guidance in many lines of life, it

should not overshadow exploration elsewhere in the question of sterility. The extreme importance of gonorrhea in the male in production of sterility is universally admitted; a very perceptible percentage of unfruitful marriages, which are unjustly attributed to some defect on the part of the woman, may be traced to a double epididymitis with hermetic closure of the tubes, or from an obscure affection of the spermatic tubules resulting in the discharge of deformed or effete spermatozoa. But of even more importance than this male sterility, the result of the action of the gonococcus when introduced into the genital tract of the woman, produces such radical changes in the mucous membranes that sterility on the part of the woman is almost certain. The alkaline leukorrhea that results is inimical to the vitality of the spermatozoids, should they be healthy. Again, if the Fallopian tubes be involved in the process, the cilii are quickly shed, and by their absence prevent the ingress of the ovum into the uterine fundus. The activity of the pathogenic process also produces such a tumefaction of the tubal walls that the lumen of the tube is obliterated, and hermetic closure follows from adhesive inflammation. Gonorrhea must therefore be regarded as the most prolific cause of sterility both in the woman and in the man.

Why Should We Not Treat the Gall-Bladder as We Do the Appendix?—Park (*American Medicine*), describes the anatomic and functional resemblance between these two hollow organs, and upon this basis the conclusion which are implied in the title of the case. He speaks, further, of the auto-intoxication which results from a retention of the products or contents of either. He says, furthermore, that the accidents and the diseases of both are in a measure similar; further than this, the symptoms of the two are in a great measure the same. The derangements of the gall-bladder affect the stomach just as those of the appendix affect the cecum. Now, Park reasons that similar treatment applies to diseased conditions in both the gall-bladder the appendix, since the structure, functions, diseases and symptoms are so closely alike in the two instances. He rarely leaves behind a diseased gall-bladder when operating upon the abdomen for any cause whatever. In closing, he describes the diseases of the gall-bladder with much wider limits as far os operation is concerned, than has been the case with most surgeons hitherto.

Indications and Prognosis of the Operations for Rectal Carcinoma.—Jaffe (*Archiv fuer Klinische Chirurgie*) lays particular stress on the fact that the best way to examine a rectal tumor is with the finger, unaided by speculum or other mechanical contrivance. If the growth be very high it may be advisable to introduce the entire hand; but this has its disadvantages and is further not necessary in most cases. In order to get the very best results, the patient should be in the standing position and press down as hard as possible, in which event the examiner can feel a mass which would escape him if any other method of investigation were used. If the anal portion must be removed at the operation, it is helpful to make a transverse incision in the perineum, and from this dissect the anterior wall of the rectum in very much the same way as one does when removing a prostrate. When the tumor is as high as four and one-half cm. above the anal ring, it is possible

to save the latter and make a circular enterorraphy; but this latter can be done only in case there is no tension on the stitches. Where there is no lymphatic involvement, the permanent results are about twenty per cent. to thirty per cent. of cures, and the mortality about five per cent. to ten per cent. It must be said, however, that the ultimate prognosis in woman is better than in man.

Standard Technics in Operative Surgery.—Dr. Edward Wallace Lee recently read a paper before the New York State Medical Association concerning the advisability of adopting a standard of technics in the performance of surgical operations. We may say at once that we are thoroughly in accord with him when he expresses the opinion that there is far too much diversity of methods in the work that may be seen in various operating rooms, and that if the many procedures now employed could be so sifted down as to leave only the actually valuable, while discarding that which is wrong or even unnecessary, surgery would be greatly benefited. When, however, we consider the prospects for the accomplishment of this desirable end, we feel inclined to doubt that it will ever be realized. We must not forget that while surgery is undoubtedly in many respects a science, it is also an art, and as such belongs to a world in which every hand leaves its own imprint. The technics of a Raphael of a Michael Angelo differed from those of great masters of other schools, and who shall say which were of greater merit? It is the master hand that counts in surgery, as in any other art, and every one to whom has been vouchsafed the genius of operative skill, and the scientific spirit without which it would count for little, will always develop methods of his own, and with them probably obtain better results than would be possible, in his hands, with any others. Perfection is nowhere to be realized upon this earth, and as long as ambitious and progressive men exist, their restless energies will forever lead them to seek improvement. Their hopefulness, perhaps even their vanity, may cause them to think that the most recent offspring of their brain is superior to any other that ever was born. The surgery of one or two centuries ago was not complex in technics, because it was not complex; procedures were few and far between, and their comparative simplicity led to uniformity of performance. We are therefore compelled to acknowledge that while the extreme diversity of our modern methods has many disadvantages, it is the mark of an era wherein the professors of our art are not satisfied to sit in solemn conclave and discuss Galen and Hippocrates; but, on the contrary, are constantly casting off ancient fetters in their onward rush upon the march of improvement, each one often striking a path of his own, but every path reaching towards a common goal. We fear that the adoption of standard operative technics could only be accomplished to the detriment of the spirit of emulation and progress to which modern surgery owes so much.

Spontaneous Rupture of the Uterus During Labor. — Toerngren reports (*Centralblatt fur Gynakologie*) the case of a patient in her eighth labor. She had three normal births, one abortion, and two confinements by forceps. The patient was in spontaneous parturition when she suddenly felt very ill and labor pains ceased. When the pelvis was examined it was found to be considerably contracted and markedly flattened. As

the patient's dwelling was not clean, she was removed to a hospital. On examination the abdomen was distended and very sensitive and near the umbilicus a portion of the fetus could be felt with unusual plainness. There was a slight discharge of dark fluid blood. It was determined to perform craniotomy, and accordingly the basiotribe was applied and the head extracted without much difficulty. The placenta was found in the abdominal cavity upon the right side of the uterus. The rupture was upon the anterior wall of the womb in the usual location. There was also a tear through the muscular tissue between the lower uterine segment and the thickened portion of the womb. The patient perished of shock within thirty-six hours after the operation. Autopsy showed beginning septic infection as the cause of death.

A New Method of Extracting Foreign Bodies From the Ear.—There is no more delicate and even difficult task, so states the *Medical Press*, than the exraction of a foreign body from the external auditory canal. Irrigation often fails to bring it away, and in certain cases adds to the difficulty by causing the object, a pea for instance, to swell and become more firmly impacted. The employment of instruments is very painful, and requires considerable dexterity, besides supposing an armamentarium specially designed for the purpose, which few general practitioners possess. The recommendation is made of a piece of soft rubber tube, the length of a cigarette, and of the proper size, to be introduced into the ear. The end of the tube is dipped in paraffin and pushed into the canal until it comes in contact with the foreign body, whereon the operator, applying his mouth to the free end, aspirates forcibly, at the same time throwing back his head. Except in cases of angular bodies of irregular contour this method is usually attended by success, the body coming away with the tube.—*Journal American Medical Association.*

Uterine Fibroids Not Dangerous in Pregnancy.—Meheut (*L'Obstet.*, Nov., 1902), has collected 85 cases of pregnancy complicated with uterine fibromyoma in the Baudelocque clinic between 1895 and 1902. In sixty-seven cases pregnancy continued to term (over 78 per cent.), in thirteen it was premature, in three abortion occurred, and in two the pregnancy was interrupted by operations. In only two cases was the fibroid the direct cause of the patient's death. Thus, though a pregnancy complicated by fibroid requires to be well watched, serious accidents are the exception. When the patient's life is threatened operative interference is necessary at once. In all cases the aim is to let the pregnancy advance as near to term as appears safe. Meheut, however, reports that out of eighty-five children, sixty-five left the clinic alive, while twenty (over 23 per cent.) were lost.

Collargolum: The Various Indications for Its Use, the Methods of Its Employment, and the Mechanism of Its Action.—(By Prof. Netter, of the Trousseau Hospital, Paris. Abstracted from the Bulletins et Memoires de la Societe Medicale des Hopitaux de Paris, January 22, 1902.)

Since publishing his first experiences with Collargolum, Prof. Netter has used it in over 130 cases, both in the form of unguentum crede and by intravenous injection. The latter is used when a quick and energetic action is necessary, or when the condition of the

skin will not permit the absorption of the ointment. The favorable influence of the medication is not always immediately noticeable and in some cases it must be frequently repeated.

Improvement is manifested in various ways. The most constant and most important phenomenon is the change in the general condition. The patient feels stronger, becomes more animated, losing depression and stupor. Many of the typhoid patients sat up in bed spontaneously, showed interest in their surroundings and asked for drink and even food. They looked brighter, the cheeks assumed more color, heartbeats became more regular and the pulse improved in strength. Even when temperature was not modified the disease lost some or the whole of its infective and typhoid character. These changes occurred with extreme rapidity, often almost instantaneously. Temperature fall took place promptly and definitely, though not in every case. The duration of the disease was often abbreviated and quick convalescence followed.

One of the typhoid cases had intestinal hemorrhages on the twentieth day, but recovery took place in spite of them. Another one, treated with Collargolum, had a relapse. Some very bad cases and some in which treatment was begun too late could not be saved.

Prof. Netter has had extremely satisfactory results in nine pneumonias, nine typhoids, fourteen broncho-pneumonias of all kinds, and four severe scarlatinas. In the diphtheria pavilion especially, the treatment has given marvellous results in 37 cases; several malignant cases that seemed necessarily fatal were cured. He was also well pleased with the results obtained in a puerperal infection, in one infectious and in one rheumatic endocarditis. He cannot sufficiently recommend the employment of intravenous collargolum injections in acute endocarditis, from any cause, following Wenckebach. In two cases of pulmonary tuberculosis in the third stage, and in six cases of tubercular meningitis no results were obtained.

Prof. Netter does not entirely attribute the action of Collargolum to its anti-bacterial properties. He believes that its catalytic power is of even greater importance and shows that all the colloidal metals are powerful catalysators. What the modifications of the blood are which the colloidal silver produces, Prof. Netter is not yet prepared to say. Analogy and hypothesis alone are at present available. Experimentation, though surrounded by difficulties, will doubtless furnish direct proofs, and will, he hopes, permit us to markedly enlarge the great field of therapeutic application for Collargolum.

A Partial Programme of the Fiftieth Annual Session of the North Carolina State Medical Society, to be Held at Hot Springs, N. C., Beginning June 2, 1903.—

The President's Address, Dr. A. W. Knox.

The Annual Oration, Dr. Joseph Graham.

The Annual Essay, Dr. E. A. Moye.

The Annual Debate, "Croupous Pneumonia," Dr. A. S. Pendleton, leader.

"The Practical Contributions of Bacteriogy to Medicine," Dr. Arthur R. Guerard.

"The relationship of micro-organisms and human beings in health and disease," Dr. Paul Paquin.

"Post-Operative Pneumonia," Dr. Lawrence E. Holmes.

"A Plea for the Early Recognition of Pleurisy," Dr. T. E. Anderson.

"Problems in the Study of the Etiology and Pathology of Pulmonary

Dependable Doses

for Children.

Superior in effects to tablets.

The medicament is carefully triturated with sugar of milk and rolled into minute pills and designated

PARVULES

We note a few of the popular kinds:

Aloin, 1-10 gr.	Calomel, 1-10 gr. 1-20 gr. 1-8 gr. 1-6 gr.
Calomel and Ipecac, aa 1-10 gr.	Capsicum, ...1-20 gr.
Dover's Powder,.....1-3 gr.	Morphin. Sul.....1-50 gr.
Nux Vomica, ...1-50 gr.	Podophyllin,.....1-40 gr.
Santonine,.....1-10 gr.	

and a list of others quite as valuable.

PARVULES are just as effective for adults; the plan of administration is a small dose, frequently repeated.

Samples and literature on request.

WILLIAM R. WARNER & CO.

Makers of

Standard Products for Physicians Prescribing,

PHILADELPHIA NEW YORK CHICAGO NEW ORLEANS

Tuberculosis Upon Which Are Based the Early Diagnosis and Treatment of the Disease," Dr. H. B. Weaver.

"Diet in Tuberculosis," Dr. C. P. Ambler.

"Intubation—Its Value—Its Status as a Surgical Resource—Preparation of the Surgeon—Intubation Outfit—Special Points Worthy of Mention—Management of a Patient Wearing an Intubation Tube—Retained Tues—Report of Cases," Dr. J. W. Long.

"Some Observations in Practice on Rheumatism Simulating Chronic Arthritis," Dr. W. W. Whittington.

"Hodgkin's Disease," Dr. W. L. Kirkpatrick.

"Remarks Upon Appendicitis," Dr. F. T. Merriwether.

"A Consideration of Injuries as Seen in Wood-Working Factories," Dr. C. A. Julian.

"The General Practitioner in Relation to Ocular Disease," Dr. H. H. Briggs.

"The Medical Side of Gynaecology," Dr. D. A. Stanton.

"The Surgical Side of Gyneacology," Dr. E. T. Dickerson.

"Man's Responsibility in Sterile Marriages," Dr. W. H. Prioleau.

"Twenty Cases of Peurperal Eclampsia," Dr. L. B. McBrayer.

"A Study of Salpingitis," Dr. H. A. Royster.

"The Perinaeum," Dr. H. S. Lott.

"On the Use of the Private Clinical Laboratory by the General Practitioner, Its Value and Limitations With Practical Suggestions as to Its Equipment and Management," Dr. Chas. Minor.

"The Normal Salt Solution, Its Physiologic Action and Therapeutic Uses," Dr. Geo. P. Edwards.

"Traumatic Occlusion of the Nares—Report of two cases," Dr. K. P. Battle, Jr., Raleigh.

"The Benefits to Be Derived from County Medical Societies," Dr. Albert Anderson, Wilson.

"The Significance of the Recently Discovered Hook-Worm Disease for the North Carolina Practitioner—with Demonstrations," Dr. Chas. Wardell Stiles, M. H. S.

"The Better Organization of the Medical Profession," Dr. J. N. McCormick.

THERAPEUTIC HINTS.

Hemorrhoids.—According to an abstract in the N. Y. *Medical Journal*, hemorrhoids may be so treated medically as to cause no great discomfort, unless they become infected, if the rules of hygiene are properly observed. Sitz baths should be taken frequently. Moderate exercise only should be taken to diminish local congestion, over-indulgence in meat and spiced foods, while vegetables and friuts must be taken freely. The bowels must be regulated, a movement obtained, if possible, just before bedtime, as the hemorrhoids swell greatly after defecation and are reduced during the night. Instead of resorting to the use of drastic purgatives a teaspoonful of the following should be taken at bedtime:

℞ Calcined magnesiæ
Potassii bitartratis
Sacchari lactis, aa . . . . ℥ss 15

M. Sig.: One teaspoonful at bedtime.

Enemas are of value and may be taken cold. However, the author states that they are preferably taken hot when

Worth Investigating

The successful treatment of consumption, scrofula, and wasting diseases generally, is a subject in which every physician is deeply interested. Hydroleine (hydrated oil) simplifies the question to a remarkable degree.

As a food for fat-starved tissues, nothing is equal to cod-liver oil, and Hydroleine is a preparation of the oil which insures its complete assimilation, because it is pre-digested by the use of pancreatine. It is stable, unirritating and free from rancidity, containing only the purest oil preserved by a minute quantity of salicylic acid; and through the agency of soda the pancreatine is protected from neutralization by the acids of the stomach.

In short, Hydroleine is prepared in strict conformity with the true principles of the digestion of fats and is unequaled

As a Producer of Weight and Strength

Sold by druggists generally.

THE CHARLES N. CRITTENTON CO., 115-117 Fulton Street, New York.
Sole Agents for the United States.

Samples free to physicians.

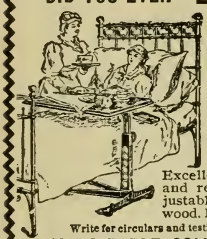
there is no pain, as the decongestive action of heat is more prolonged than that of cold. As an astringent, a teaspoonful of alum may be added to the enema.

The following combination is sometimes recommended internally:

℞ Ext. hamamelidis.....gr. ¾ | 05
Ext. capsici aqueous...gr. iss | 09

M. Ft. pil. No. i. Sig.: One such pill three or four times a day.

DID YOU EVER ENJOY A MEAL IN BED?



Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
CLEVELAND, O.

Keeley Cure

For Drunkenness and Drug Using.

Please write us. Correspondence confidential.

THE KEELEY INSTITUTE, Dept. B, Greensboro, N. C.

Our Illustrated Handbook Sent Free On Request

NEURILLA

NERVE CALMATIVE

NERVE HEALTH follows its use.

Dose: Teaspoonful every half hour until nervousness is abated, then four times a day. Teething Children 10 to 20 drops.

DAD CHEMICAL COMPANY, NEW YORK.

When the hemorrhoids protrude externally and are accompanied by pain, a pledget of cotton may be soaked in a 1 per cent. solution of cocaine and applied locally; this will relieve the pain temporarily, but the inflammation must subside before permanent relief can be obtained. Applications of very hot or very cold water are recommended by the author or liquor plumbi subacetatis may be employed or spraying with hot boric acid solution. The anus must be kept clean and only absorbant cotton used in order to produce no irritation.

In cases of internal hemorrhage coming down during defecation and returned with difficulty, the patient should be instructed to lie on his side with the lower thigh extended and the upper one flexed and with a compress soaked in water or olive oil they should be reduced with gentle taxis.

The following combinations are recommended in the form of suppositories:

℞ Ext. krameriæ....gr. viiss | 50
Cocainæ hydrochlor..gr. ½ | 02
Ol. theobromæ.....3i 4 |

M. Ft. suppos. No. i. Sig.: One such to be used night and morning to relieve the pain.

Sepsis Following Abortion.—Henry, in *Medical News*, recommends the following outline of treatment of sepsis complicating uterus by means of the finger or sharp curette followed by flushing and thoroughly cleanse the raw surfaces, the cervix, vagina, and vulva. These raw surfaces should then be dried and a 95 per cent. solution of carbolic acid applied to them freely, washing away the surplus with sterile water. No tubes or packing should be left either in the uterus or vagina unless hemorrhage should require it.

According to the author a 2 per cent. carbolized vaginal douche should be

used twice daily. The bowels should be kept free by the administration of one-half grain (.03) of calomel every hour for four hours, followed by the ordinary dose of salts.

Quinin should be given in three-grain doses (.20) every four hours, alternately with ferric chloride given in fifteen minim doses (1.00) well diluted.

Nourishment consisting of milk, eggs and proper stimulants should be given every four hours.

Eczema.—The following combination is recommended by the *Indian Medical Gazette* in the treatment of eczema:

℞ Acidi borici.....	gr. xxx	2
Zinci oxidi		
Amyli tritici, aa..	ʒ vi	24
Liq. petrolati	ʒ xiii	52

M. Sig.: Apply twice daily with a glass rod. Smear the salve thickly over the affected part and then cover it with a layer of cotton wool and apply a suitable bandage. The parts should be thoroughly cleansed every third or fourth day and a fresh application made. This may be repeated until all signs of inflammation have disappeared.

Chem. Lamoratory Experience.—41144. "Purification by Explosion, or How to become an Angel." Immerse iodine in aqua ammonia. Filter. Dry the precipitate. Then grind the precipitate in mortar with pestle. Write up your notes in the next world.—*Harvard Lampoon.*

Our policy has always been liberal toward our subscribers, but on page 255 you can learn of something unusual, something we are pleased to offer our friends.

Doctor:

If you can use, to advantage, a reliable, cheap, efficient agent in the treatment of Leucorrhoea, etc., send for a sample and literature.

LEUKRETOL CHEMICAL COMPANY,

Winston-Salem, N. C.

Obsteterics, a text-book for the use of students and practitioners. By J. Whitridge Williams, Professor of Obsteterics, Johns Hopkins Hospital; Gynaecologist to the Union Protestant Infirmary, Baltimore, Md., with eight colored plates and six hundred and thirty illustrations in the text: D. Appleton & Company, New York and London.

This is a handsome volume of some 850 pages, properly illustrated. In it the author has set forth as briefly as is compatable with thoroughness and clearness the science and art of obsteterics. Particular attention is given to fundamental principles, and the reader will find a concise and practical exposition of the normal and pathological anatomy of the female generative tract and the mechanism of labor—a majority of the illustrations are original and will be found peculiarly apt in elucidating the text.

The work is divided into eight sections, taking up in regular order, anatomy, physiology and development of the ovum; physiology of pregnancy; physiology of labor; obsteteric surgery; pathology of pregnancy; pathology of labor, and the pathology of puerperium.

It is impossible in a limited space to give a satisfactory synopsis of each section, but, while all are good, we have been particularly struck with the section upon the physiology of pregnancy and of labor, and the section on obsteteric surgery is worthy of especial attention. The management of the placenta after the delivery of the child is also a portion of the book that should be carefully read by practitioners. The author holds that next to the discovery of asepsis, the modern method of delivering the afterbirth is perhaps the greatest life-saving agency in the art of obsteterics. In this conclusion doubtless a majority of obstreticians will agree with him.

In respect to repair of the prineum after lacerations, a procedure which is carefully described, the author advocates as the most suitable time for placing the stitches, the interval between the birth of the child and the delivery of the placenta. The stitches are of course left untied until after the placenta delivery is accomplished.

In conclusion it may be said that this volume represents the present-day views of the ablest teachers of obsteterics in as clear and practical a manner as can be found in any modern work upon the subject. We can cordially commend it to those desiring a book of this character.

THE INTERNAL SECRETIONS AND THE PRNICIPLES OF MEDICINE.—By Chas. E. de M. Sajous, M. D. Fellow of the College of Physicians of Philadelphia; Member of the American Philosophical Society, the Academy of Natural Sciences of Philadelphia, Etc.; Knight of the Legion of Honor and Officer of the Academy of France; Knight of the Order of Leopold of Belgium, Etc.; Formerly Lecturer on Laryngology in Jefferson Medical College and Professor of Laryngology and Dean of the Faculty in the Medico-Chirurgical College; Formerly Professor of Anatomy and Physiology in the Wagner Institute of Science. Volume I., with Forty-two Illustrations. Philadelphia, F. A. Davis Company, Publishers, 1903.

The author, who has long been identified with the "Annual of the Universal Medical Sciences," and more recently with the "Analytical Clyclopædia of Practical Medicine," prefaces this volume by saying it has been his endeavor to follow carefully the development of the various branches of medical science in order that he might finally collate the necessary elements for a more solid foundation than we now possess. This volume is an effort in that direction. While many investigators have sought to elucidate the chemistry of cellular metabolism, still they cannot trace the oxygen through its sojourn in the tissues and only know that sooner or later it comes back combined in carbonic acid (and other matters not now under consideration)." This was wisely said by Foster in 1895. To solve the problem of tissue-respiration, the author turns from the beaten paths to seek a solution on the physiology of the ductless glands. The marked affinity of adrenal extractives for oxygen was first noted; adrenal functions in all vertebrates were found to be similar, hence experimentation on lower animals would give data for study of same in man; by these experiments was learned that the adrenals were the key to tissue respiration as well as to functions of all "ductless glands;" that the heart, lungs, liver, etc., were subsidiary structures which obeyed the mandates of these glands, whose functions heretofore have been unknown. It was further found that red blood corpuscles were secondary factors in the oxygen carrying function, that is, mere carriers, as it were, and that it was the oxygen-laden adrenal secretion dissolved in the plasma itself which carried on all the oxidation processes of the organism.

The "oxidation ferment" of Schmiedeberg, Jaguet, Salkowski and others;

DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

JOHN R. IRWIN, M. D.,

CHARLOTTE, N. C.

Special Attention Given Surgery and Gynecology.

DOCTOR :

ELIXIR of MALTOPEPSINE

(TILDEN)

Is as reliable in CHOLERA INFANTUM as Quinine in Malaria.

It is absolutely reliable in all conditions arising from faulty digestion; palatable and acceptable to the most delicate stomach. Don't fail to investigate this most meritorious preparation.

Prepared Expressly for Physicians' Prescriptions.

Free Sample and Literature on Application.

Manufactured only by

THE TILDEN COMPANY

New Lebanon, N. Y. **St. Louis, Mo.**

Claud Bernard's "ferment in the blood" and Lepines "glycolytic ferment" correspond to the oxygen-laden adrenal secretion (adrenoxin). Thus was seen in a new light many physiological problems among them how oxygen could enter the "minute net work of all cellular elements;" how it combines with myosenogen to generate muscular force, with myelin and forms nerve energy.

From a study of the adrenals the author passes to the anterior and posterior pituitory bodies; the anterior pituitary though once thought useless, is found to be most important organ of the body, because it presides over the adrenals, which control nutrition. Having discovered the great function of adrenals or suprarenals, the author's attention was directed to the other ductless glands. These studies showed the adrenals to be directly connected with the anterior pituitory gland, through the solar plexus, the splanchnic nerves and the cervico —thoracic ganglia of the sympathetic and that this little pea-sized body is one of the most important organs of the human system, because it governs through the adrenals all the oxidation processes of the body. "In general diseases what has been termed the patient's vitality, or "vital resistance," thus became ascribable to fluctuations in the anterior pituitory body's functional efficiency." In other words, over-activity of this organ, by correspondingly enhancing the production of adrenal secretion was found to increase metabolism and activity of functions in proportion; while depression of its normal activity by inhibiting the adrenal secretion and thus reducing the quantity of oxygen distributed throughout the entire organism, proportionately lowered the activity of all vital processes. But what maintains functional activity of the anterior pituitory? This led to consideration of the thyroid gland, which was found to sustain the pituitory by its secretion of iodo-thyrine. This secretion in excess and pro-

longed gives rise to "exophthalmic goiter;" a reduction of this secretion by inhibiting anterior pituitary produced myxœdema. The adrenal system was thus found united by function and consisted of thyroid gland, anterior pituitary and the adrenals or suprarenal capsules. It was further found that any poison introduced into the circulation had same effect on anterior pituitory as did thyro-iodine; that is, that poisons instead of acting directly on cells or blood either stimulated or depressed the functional activity of adrenal system and thereby the oxidizing power of the plama of blood. Thus change in our belief as to manner of action of general infections or other forms of poisons upon the system is necessitated.

We must consider now that symptoms of infections or poisonings, severe or mild, are signs of over-activity or deficiency of the adrenal system. The author claims the foregoing conclusions have a very inportant bearing upon the prevailing ideas as to the pathogenesis and treatment of the "great scourges of humanity." Asiatic cholera in its symptoms corresponding to symptom-group of adrenal insufficiency and due to effect of cholera toxines upon the anterior pituitary body and the only treatment of avail being active stimulation, which is but using agents which increase the secretion of this gland. Likewise "cholera infantum, arsenic poisoning, various taxalbumins and other intoxications produce identical symptoms and are primarily due to deficient adrenal insufficiency. Pulmonary tuberculosis is a disease due to lowered nutrition, that is, lowered adrenal function, which places system in vulnerable condition for the tubercle bacillus. Then the writer discusses syphilis, pneumonia, tetanus, epilepsy, hydrophobia, septicae-

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:
8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

mia, eclampsia and kindred disorders from the adrenal view point.

The author then takes up the posterior pituitory body and finds it to be the "chief function centre of the nervous system," and the co-center of the anterior body, and in this connection discusses all forms of shock and the part this gland plays in influenza, hay fever, hysteria and catalepsy. The author next discusses the functions of the lencocytes and finds them to be chiefly the oxygenators of the tissues and the red blood corpuscles are only carriers. Next is considered the pancreatic secretion and its relation to the pituitory gland and to the blood corpuscles and finally its bearing on minimizing medicine. The author does claim that position he has assumed in the discussion of the internal secretion is invulnerable, but that he has opened up a broad field for study and that eventually the great science of medicine will be laid on a more accurate basis. This volume is one of the most original contributions to medicine which has appeared in recent years, and we look forward to the publication of a second, which will consider special pharmacodynamics and physiological pathology in the light of this new research.

The Practical Treatment of Stammering and Stuttering.—With Suggestions for Practice and Healthful Exercise. By George Andrew Lewis. With a Treatise on the Cultivation of the Voice, by George B. Hynson, M. A. Detroit, George Andrew Lewis, 1902.

The object of this book is well described in its preface. The authors have been particularly interested for a long time in studying human speech and its defects, and they have now prepared a book in which they deal with the classification and characteristics of stammering and stuttering, and the treatment which they think should be instituted for the relief of patients who suffer from these difficulties of speech. The first 166 pages of the book deal with these defects, and the last half of the book deals with the cultivation of the voice, and with exercises which are designed to enable the individual to practice the proper use of his vocal apparatus. The volume insists wisely upon the fact that no pupil can gain all the necessary advantages from the mere reading and instruction which he obtains in any volume, be it written never so well. In the vast majority of instances it is absolutely necessary that the personal element of the teacher should be exercised in order that complete control of the patient and his methods of speech be attained. This seems to us the most sane and sensible method of treating stammering which we have seen exploited for a long time.

Book Review—

Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition.—By Prof. Dr. Carl von Noorden, Physician in Chief to the City Hospital, Frankfurt a M. Authorized American Edition Translated under the Direction of Boardman Reed, M. D., Professor of Diseases of the Gastro-Intestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia. Part III, Membranous Catarrh of the Intestines (Colica Mucosa), by Prof. Dr. Carl von Noorden, with the Collaboration of Dr. Carl Draper. New York, E. B. Treat & Co., 1903.

This little volume on mucous clititis is one of a series of monograms on dis-

THE PRESBYTERIAN HOSPITAL

Will Receive all Classes

Of Medical and Surgical Cases,

(Except Contagious.)

A Full Corps of PHYSICIANS

and SURGEONS in Attendance.

Address,

PRESBYTERIAN HOSPITAL,

Charlotte, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain CACTINA, the active proximate principle of CEREUS GRANDIFLORA.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for INDIGESTION

A palatable preparation of PANAX SCHINSENG in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

eases of metabolism and nutrition which will appear simultaneously in New York and Boston. This plan of publication is a commendable one, and will, no doubt, receive the approval of the medical profession, particularly those who are not conversant with the German language. The plan of treating membranous colitis on a systematized coarse diet does not receive the approbation of all German authorities (notably Boas), still the markedly successful results obtained by the author would warrant its trial in this most obstinate affection. The pathology of this disease is carefully considered and the book is a valuable contribution to the literature of this subject.

The *Home-Maker* is the significant and appropriate title of a new magazine edited by Mrs. Emma F. A. Drake, M. D. It is a home magazine, dealing with the problem of parents and children,

along lines of right-thinking and living. Dr. Drake is the author of several books. Her book to young wives secured her a prize of one thousand dollars from the Vir Publishing Company, of Philadelphia, but beside her distinction as an author, she presides as wife and mother in a beautiful Christian home. The *Home-Maker* is $1.00 a year and is published at Denver, Colorado.

Hyperchlorhydia, a Symposium.—The June issue of the *International Medical Magazine* will be devoted to a symposium on this most important gastric subject, than which none more important has ever been published in any American journal. More than half a dozen of the leading European specialists will contribute, among whom are: Prof. C. A. Swald, Berlin; Prof. Geo. Haymen, of Paris; Prof. Carl von Noorden, of Frankford; Dr. L. Kuttner, of Berlin; Prof. Rosenheim, of Berlin.

The selection of contributors from this side of the Atlantic has been equally happy, and the following will take part:

Prof. John C. Hemmeter, of Philadelphia, on "An Experimental and Clinical Study of the Etiology of Hyperchlorhydria."

Dr. Allen A. Jones, of Buffalo, on "The Effervescence Test for Gastric Acidity."

Dr. Boardman Reed, of Philadelphia, on "A Further Development of the Benedict Effervescent Test of Gastric Acidity."

Dr. John A. Lichty, of Pittsburg, on "The Relation Between Hyperchlorhydria and Neurasthenia."

Prof. Frenton B. Turck, of Chicago, on "The Treatment of Hyperchlorhydria."

Dr. A. Robin, of Newark, Delaware, on "The Etiology of Hyperchlorhydria."

Dr. Max Einhorn, and others.

We invite the attention of all our subscribers to a proposition made on page 255 of this issue.

MEDICAL NEWS AND ITEMS.

The meeting of the North Carolina Medical Society in Hot Springs on June 2d promises to be an enjoyable and profitable occasion. The mountains will then be at their best so far as beauty is concerned, and the season far enough advanced for the cool nights to be a treat to the deizens of the lower country. A very attractive programme is already booked (see elsewhere) and many other papers will yet come in. Send the title of your paper to the Secretary, Dr. J. Howell Way, Waynesville, N. C., and it will appear on the official programme.

Doctors: Don't forget to put an extra dollar in your pocket for the CAROLINA MEDICAL JOURNAL when you start to Hot Springs.

Newly Elected Officers of the American Medical Association.—President, Dr. J. H. Musser, of Philadelphia; first vice president, Dr. G. C. Savage, Tennessee; second vice president, Dr. Isadore Dyer, of New Orleans; third vice president, Dr. C. L. Hall, of Missouri;

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these Preparations.

A

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

R Each fluidounce contains:

Hypophosphites Soda	2 gr.
" Lime	1½ gr.
" Iron	1½ gr.
" Quinine	¾ gr.
" Manganese	1½ gr.
" Strychnine	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate Sodium	12 grains
" Potassium	4 "
" Calcium	4 "
" Iron	2 "

FREE Monohydrated Phosphoric Acid 16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE.—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

C

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence of a sedentery life, coupled with nervous and mental stal strain.

Reliable Pepsin is one of the best Digestive agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating. Children, one-half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromatic menstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable.

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50.
N. B.—We also make 25 per cent. strength.
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

Saloform, in Powder, per ounce	$1 25
Saloform, 5-grain Tablets, per 100	1 25
Saloform Elixir, pints	2 00
Solution Albuminate of Iron, Syrup Albuminate of Iron Comp., pints	1 00
Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

Please specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

Founded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

The Hopkins Compressed Air Heaters

Electric Gas Alcohol

The Perfect Instrument for treatment of the ear with superheated air. Practically indestructible. Patented in all features. All kinds of special electric heaters for medical work. Write for booklet.

THE TERRY HEATER CO.,
Cleveland, Ohio.

fourth vice president, Dr. G. F. Jenkins, of Iowa; treasurer, Dr. Henry P. Newman, of Chicago; secretary, Dr. George H. Simmons, of Chicago. Dr. F. H. Wiggin, of New York, G. B. Gillespie, of Tennessee, and D. C. Peyton, of Indianapolis, were re-elected members of the judicial council. Dr. W. J. Mayo, of Minnesota, was elected orator on surgery, and Dr. H. M. Biggs, of New York, orator on state medicine. The new business committee is made up of Edwin Walker, of Indiana, chairman; A. R. Craig, of Pennsylvania; G. M. Kober, District of Columbia; T. J. Murray, Montana, and William Davis, Minnesota. It transpired that Dr. Musser, who was elected president, had left the city yesterday, and could not be installed. After considerable discussion it was decided that Dr. Musser be installed at the opening of the next annual meeting, and that the constitution be amended to continue him in office until then. The present president, Dr. Billings, of Chicago, will hold over until the annual meeting in Atlantic City, in 1904.

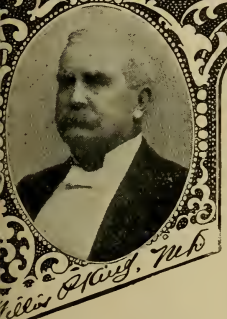
Texas has passed a bill compelling the railroads to disinfect their coaches. A *long* step in the *right* direction.

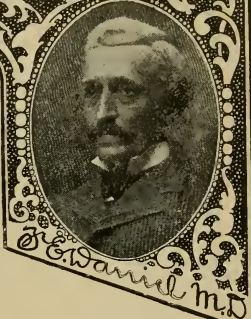
The Illinois School of Electro-Therapeutics, upon the entry of its fifth year of work in Chicago, goes into their elegant new quarters at 35 E. Randolph street, where they have abundance of space and seating capacity to meet the increased demand made upon them for

SOMETHING FOR LEISURE HOURS

STORIES OF A COUNTRY DOCTOR

RECOLLECTIONS OF A REBEL SURGEON





ALL WORK AND NO PLAY MAKES JACK A DULL BOY

Here are two books chock full of wit, fun and pathos, that should be on every doctor's table. Their titles tell the story. They speak for themselves. Each $1, post-paid

The Clinic Publishing Company, - Ravenswood Station, Chicago.

the practical instruction and advancement of that which promises much to the practictioner of medicine. Their labors have been appreciated and physicians from every State and Territory, as well as from many foreign provinces, have availed themselves of the superior advantages of this excellent ethical school of instruction.

We are indebted to the *Medical Age* for many of these notes.

There are 186 women physicians in Philadelphia.

The plague has disappeared from Mazatian, Mexico.

Harvard is to have new medical buildings, costing $2,000,000, of which J. P. Morgan contributes one-half.

California swings into line, a bill having been passed for the regulation of the practice of medicine in that State.

The present epidemic of cholera in the Philippines numbers over 125,000 reported cases.

The Mexican government proposes to grant an annual appropriation to the Liverpool School of Tropical Medicine.

Charbon Attacks Human Beings in Louisiana.—In the parish of Acadia, Louisiana, some 225 head of cattle have died recently from charbon. The farmers, ignorant of the infectious nature of the disease, skinned some of the dead animals and sold their skins. As a result thirteen human beings have contracted charbon. The police jury of Arcadia has been called together to take steps to stamp out the disease.

Medical Practice Act for New Jersey.—The State Board of Medical Examiners of New Jersey has secured amendments to the Medical Practice Act of that State by which the academic standards for admission to the State examinations have been raised from a competent common-school education to a diploma issued after four years of study in a normal, manual training, or

high school of the first grade in that State, or its equivalent. The medical requirements have been increased from three to four courses of medical lectures of at least seven months each, in different calendar years, prior to receiving the degree of Doctor of Medicine. The amendments go into effect on July 4th next. After that date candidates for examination, or for the endorsement of a license issued by a recognized examining board of another State, will be obliged to comply with the new standard of requirements for a New Jersey license.

One of the most difficult problems in dealing with tuberculosis among the poor is undoubtedly the supply of suitable and sufficient food. This question has been grappled with by an organization for the improvement of the condition of poor sufferers from tuberculosis which has recently been formed by some ladies among the "leaders of society" at Cambridge, Massachusetts. In order to make the work practical all the medical practitioners in the city have been asked to co-operate with the organization by sending to the members designated the names of those who lack the means to provide themselves wholesome and nutritious food. The dietary which the practitioner prescribes will be indicated by a diet card, and this food will be supplied at the expense of the organization. The organization will also be aided by district nurses, who will visit the patients in their homes. It is intended that the work of the organization shall be educational as well as remedial.

Lectures for train men, to be given by Jefferson Medical College, will soon be begun, both the Pennsylvania and Reading Railroad companies having agreed to permit their employes to attend the lectures.

Dr. Frederick Mueller, the assistant of Prof. Lorenz, has returned to this country, and will take up his residence in Chicago, where he is to have charge of a hospital devoted especially to orthopedic surgery.

On March 12 news was transmitted to the Bureau of Animal Industry, Washington, from Boston, stating that four herds of cattle, aggregating sixty-three animals, had been found near Bedford, N. H., affected by foot-and-mouth disease, and had been slaughtered.

Official statistics recently published show a great diminution in tuberculosis mortality in the Prussian States between the years 1876 and 1901. In 1876 the death rate from tuberculosis was 31 per 10,000 of population; in 1891 it was 27; in 1896, 22; in 1901 it was 20.

The death of Prof. Panas, of the University of Paris, has deprived the profession of a distinguished ophthalmologist. Professor Panas was a Greek by race, a British subject by nativity, having been born in the Ionian Islands while they belonged to Britain, and a Frenchman by adoption.

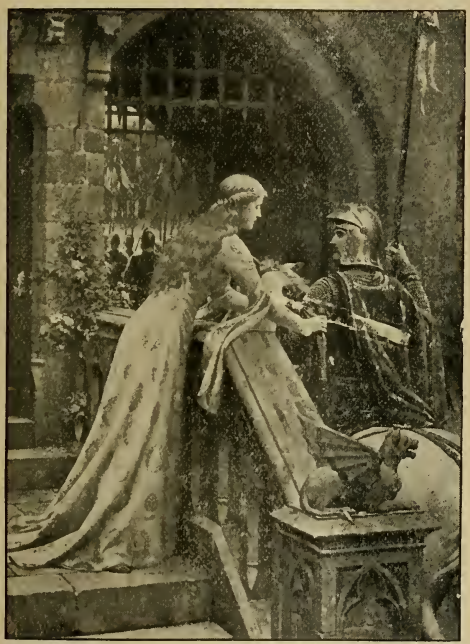
A traveling graduate medical school, to visit all the cities of sufficient size and have clinics and lectures by eminent men, is proposed in Germany. The practitioners in the surrounding territory would thus gather for a week or two once a year in their nearest town. —*Jour. of the Amer. Med. Association.*

The Board of Health of Rockford, Illinois, having come to the conclusion that cats are largely responsible for the spread of contagious and infectious diseases, has issued an order that all cats living in the houses in which there are cases of scarlet fever, diphptheria, or other contagious diseases shall be put to death.

It is stated that Prof. Behring, the discoverer of anti-diphtheritic serum,

An Elegant Reproduction of a Charming - - - - $15,000 Painting GIVEN AWAY

We have been fortunate in making arrangements with the publishers of the WOMAN'S HOME COMPANION, so that we are able to give our subscribers a chance to accept the biggest offer ever made by any publishing house. The picture that we offer here is by E. Blair Leighton, R A., a most celebrated artist. When exhibited for the first time it was quickly bought up at the enormous price of $15,000, and hung in a famous gallery, where it is admired by thousands and thousands.



REDUCED ILLUSTRATION "GOD SPEED" FULL SIZE 22 BY 28 INCHES

Woman's Home Companion

This magazine is edited and made up in the city of New York, the leading literary and art center of America. It is printed on the finest paper, has 44 to 60 large pages, 11 by 16 inches. It contains the Best Short Stories, Fashions, Children's Pages, Prize Contests Monthly, Nature-Study Club, Embroidery, Physical Culture, Talks With Girls, Nurse Norah's Fairy Tales, the Most Popular Serial Stories, Handy Tool Series for Boys, Sam Loyd's Puzzles, Science and Invention, Social Studies, the Dining-Table, the Kitchen, Twelve Stirring Historical Events Pictured by Celebrated Artists. The twelve numbers will contain more than one thousand beautiful illustrations. Its 400,000 copies every month carry messages of help, profit, pleasure, education, culture and refinement to over two million readers. Its writers and artists are the most famous in America. It is altogether the cleanest, brightest, handsomest, choicest and best of American home magazines published at $1.00 a year.

A Total of Over $700 for only $1.85

"God Speed," very, very cheap at - - - - $5 00
Woman's Home Companion, one year, price - 1 00
Carolina Medical Journal, one year, price - - 1 00

} Both Papers One Year and this Picture sent to any address for only - - - **$1.85**

In this offer, although paying less than the ordinary and regular price of the papers for a year, you get in addition the above described charming picture entirely free. The papers and picture in the above offer can go to different addresses. The above offer applies to old and new subscribers. Send all orders to this office.

CAROLINA MEDICAL JOURNAL, CHARLOTTE, N. C.

has announced the discovery of a serum by means of which calves can be made perfectly immune to tuberculosis, and which he believes will be equally applicable to human beings.

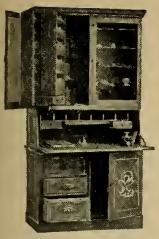
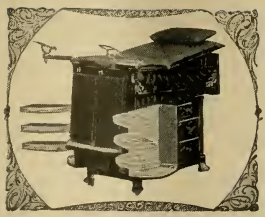
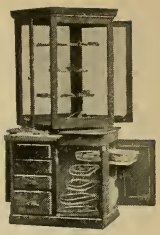
A new drug laboratory has recently been established in the Chemical Bureau at Washington, with the object of investigating adulterations, testing drugs, and establishing uniformity in the standard of medical substances for future State and National legislation. The American Pharmaceutical Association has passed resolutions approving of the new bureau. Mr. L. F. Kobler, of Philadelphia, has been appointed director.

It is asserted that several physicians and a number of associations in Berlin will test the value of sea air in a number of patients suffering from tuberculosis. As ordinary steamers, owing to the noise, unpleasant smells, and want of proper accommodations, are unsuitable, it is proposed to build a large floating sanatorium with roomy, open-air wards, medical supervision, and a complete equipment for scientifically testing the effects of the sea air. The cruising ground is to be the northeastern Atlantic, in the neighborhood of the Canary Islands. Should success attend the effort, further floating sanitoriums will be built. The voyages will, according to *American Medicine,* last about six weeks.

Discovery of a Plant Which Drives Away Mosquitoes.—In certain parts of West Africa the knowledge has long been prevalent among the natives of the existence of a certain species of plant which, if placed in a room, will drive away all mosquitoes. An English medical officer has been making investigations, and has found that the natives in Lakoja make use of this plant to protect themselves from the swarms of mosquitoes. Captain Larymore sent specimens of the plant to England for identification, and experts found it to be *Ocimun virile* Willd. It is a member of the order Labiatæ, which grows from Senegambia southward to Angola. Capt. Larymore found that the presence of these plants in a room undoubtedly drove mosquitoes out, and by placing three or four around his bed at night he was able to sleep unmolested without using the mosquito net. If this plant can be successfully grown away from its native soil, it will prove a boon to people living in localities which swarm with mosquitoes during the summer months.

A Step in Advance.—Spain is scarcely the country to which one would look for any great progressive movement, yet she has recently initiated a reform which is entirely in harmony with advanced notions in state medicine. Finding that the asylums and eleemosynary institutions were being filled with needy degenerates, from purely economical motives, the Spanish government has insisted upon medical sanction as indispensable to the marriage contract. It is hoped in this way to provide some check upon the increasing production of indigent, needy, and insane. The step is a rational one, and will doubtless commend itself to other nations in time.—*Medical Age.*

Dr. W. H. Baldwin (*Alk. Clinic*) has found that when all other foods have given out, in a case of typhoid fever, ice cream will be gratefully received by the patient longer than any other nourishment, and he has never seen any bad results; on the contrary, it does good, is well borne and at times appeared to modify the disease It should be home made, with plenty of rich cream and

A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your patients. Therefore, in the selection of your equipment you should exercise great care. The testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

Are the best and are adapted to all lines of regular and special practice. They are superior in workmanship and design, and include more conveniences than any other line on the market. (Catalogue "A" fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

A Sanatorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

Beautifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

MAPLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

---

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &C.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents.

Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

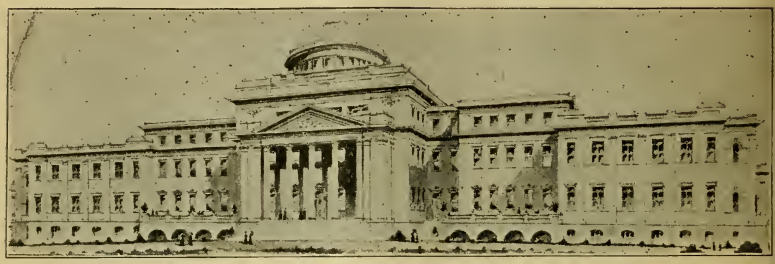
POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

Presbyterian College for Women....

Charlotte, N. C.



Magnificent New Buildings. Every Essential of Health and Comfort. Good Fare. Experienced Teachers. Standard Advanced. Music and Art our Specialties. Charges lower than any other School of same grade in the South.

REV. J. R. BRIDGES, D. D., President.

raw eggs incorporated. Feed in small quantities and often, varying flavor to suit the patient's taste.

It is stated in the English newspapers that the prevalence of appendicitis has suggested to one of the most prominent firms in Lloyd's that the public might like to insure against that disease. For a premium of one dollar the assured, if he has to undergo an operation for appendicitis, will have all his direct expenses paid up to $1,000, and in the event of his death under or from the operation, a total sum of $1,000 will be paid. Although the idea has quite recently been mooted it is said that a large number of people have already availed themselves of this insurance.

More Work for Niagara.—Another draft is to be made upon the gigantic working power of Niagara Falls. On the Canadian side, in the Victoria Park, a new power plant is under construction. Its first section, now being built, will provide 50,000 horse power, by means of five generators of 10,000 horse-power each. This is twice the capacity of the separate generators now used on the New York side. By increasing the size of the generators, it is found that the cost per horse-power is lowered. By means of cables, the New York and the Canadian plants will be connected for parallel operation.

His Idea of It.—Sunday School: "Reginald, can you repeat the shortest commandment? It has but four words."

Reginald: "Keep off the grass!"

"Boys," said the professor, "when I am endeavoring to explain to you the peculiarities of the monkey, I wish you to look straight at me."

A Physician's Reputation Depends

On the Cures He Can Make.

We can assist you, and we hope the very best men in the profession will read this :

Echols Piedmont Concentrtaed Iron and Alum Water has been prescribed for years by a great number of eminent practitioners, principally in Virginia, but this Company has been incorporated with $50,000 capital, and is now calling the attention of every physician in the United States to its merits.

Our Concentrated Water is not a patent medicine, but is the product of the natural water as it comes from the Springs, reduced 160 times by a process which retains all its medicinal properties, and we do not believe it has an equal for the cure of Chronic Diseases, such as Indigestion, Scrofula, Rheumatism, Female Complaints, Stomach and Bowel Troubles, Catarrah, Kidney and Bladder Complaints, and all Blood Diseases.

The analysis found below should commend itself to every physician.

ANALYSIS.

UNIVERSITY OF VIRGINIA,
CHARLOTTESVILLE, VA., March 19, 1895.

Dear Sir : The Piedmont Iron and Alum Mass sent me by you contains :

Ferric Sulphate	14.732	Ammonium Sulphate	Trace
Ferrous Sulphate	17.236	Lithium Sulphate	.071
Zinc Sulphate	.098	Hydrochloric Acid	1.687
Aluminum Sulphate	3.782	Aluminum Chloride	15.022
Cobalt Sulphate	.069	Meta-Salicic Acid	.311
Manganese Sulphate	.083	Phosphoric Acid	Trace
Copper Sulphate	.087	Insoluble Siliceous Matter	.808
Nickel Sulphate	.021	Organic Matter	.205
Calcium Sulphate	5 644	Water	34.037
Magnesium Sulphate	4 195		99.728
Sodium Phosphate	1.218		
Potassium Sulphate	.395		

J. W. MALLET,
Prof. of Chemistry, U. of Va.

(This analysis is made from the Concentrated Water reduced to Mass, but we have discontinued making the Mass, as the Concentrated Water produces better results.)

To any physician wishing to test our preparation on some particular case, we will send 18 oz. bottle free of charge.

For Sale by all Druggists ; 8 oz. bottles 50 cents. 18 oz. bottles $1.00.

J. M. ECHOLS CO., *Lynchburg, Va.*

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED IN 1881—OPENED IN 1882.

The New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant, and the hospital wards adjoin the lecture rooms. Since the fire in 1896, a new building has been erected and thoroughly equipped, and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James P. Tuttle, M. D.; John A. Wyeth, M. D.
MEDICINE—Isaac Adler, M. D.; Morris Manges, M. D.; W. H. Katzenbach, M. D.; J. D. Nisbet, M. D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt. H. Wylie, M. D.; Brooks H. Wells, M. D.; W. Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—August Seibert, M. D.
DERMATOLOGY—Edward B. Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O. Born, M. D.; W. E. Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M. D.; Robert C. Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederich Whiting, M. D.
EUROLOGY—B. Sachs, M. D.
OBSTETRICE—Edward A. Ayers, M. D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York.

THE CHARLOTTE OBSERVER,

CHARLOTTE, N. C.

J. P. CALDWELL, Editor. DAILY AND SEMI-WEEKLY.

North Carolina's Foremost Newspaper.

Independent and fearless; bigger and more attractive than ever. The most complete telegraphic Press reports in existence. All the news of the world. Complete Daily reports from the State and National Capital

SUBSCRIPTION PRICE.

Three Months	$2 00
Six Months	4 00
One Year	8 00

THE SEMI-WEEKLY OBSERVER, Published on Tuesdays and Fridays at $1 00 per year.

CASH OR CREDIT.

Catalogue FREE.

PRICE $33.50

It will pay you to send for our Catalogue No. 6, quoting prices on Buggies, Harness, etc. We sell direct from our Factory to Consumers at Factory Prices. This guaranteed Buggy only $33.50; Cash or Easy Monthly Payments. We trust honest people located in all parts of the world.

☞Write for Free Catalogue.

MENTION THIS PAPER.

CENTURY MF'G CO. DEP'T 352 East St. Louis, Ill.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

PROTARGOL

The Non-Irritating Substitute for Nitrate of Silver.

HEDONAL

The Promoter of Natural Sleep.

TANNIGEN

The Intestinal Astringent

LACTO-SOMATOSE

The Food for Diarrheal Diseases.

FERRO-SOMATOSE

The Ferruginous Nutrient and Tonic.

HELMITOL

The Urinary Antiseptic, Analgesic.

THEOCIN

The Most Powerful Diuretic

PHARMACEUTICAL PRODUCTS

BAYER

FARBENFABRIKEN vorm. FRIEDR. BAYER & CO.

New York

Samples and Literature supplied.

MELLIN'S INFANTS' FOOD

Mellin's Food babies have pink cheeks, bright eyes, sound teeth, strong limbs and firm flesh.

Our book, "The Home Modification of Cow's Milk," sent to physicians free upon request.

Mellin's Food Co. : : : Boston, Mass.

THERAPEUTIC QUALITIES

THE absolute absence of all OPIATES, NARCOTICS, and ANALGESICS, thus offering, instead of false roundabout and mere transitory relief, a true and scientific treatment for AMENORRHEA, DYSMENORRHEA, and other IRREGULAR MENSTRUATION.

In these conditions and the most obstinate cases of SUPPRESSED and RETARDED MENSTRUATION, Ergoapiol (Smith) (though devoid of the above unpleasant features, which are so often followed by a sad sequela) possesses a remarkable power to obviate pain and to bring about a healthy activity of the menstrual functions through its direct tonic and stimulating effect upon the Uterus and its appendages.

CAUTION.

To obviate Substitution or other possible error in compounding, it is advisable always, besides specifying ("Smith") when prescribing Ergoapiol (Smith), to order in Original Packages only, as in facsimile prescription appended.

These packages contain twenty capsules each, and are so constructed that all printed matter pertaining thereto can be readily removed.

℞

Ergoapiol. (Smith)--- Caps. XX.
Orig. pack.

MARTIN H. SMITH CO.,
NEW YORK, N. Y

SOLE BRITISH AGENTS:
THOMAS CHRISTY & CO.,
LONDON, E. C.

BROADOAKS SANATORIUM.

ISSAC M. TAYLOR, M. D.

Morganton, North Carolina.

A Private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

The Carolina Medical Journal Reaches all the Doctors of the Carolinas.

St. Luke's Hospital,

1000 West Grace St.,

RICHMOND, VIRGINIA.

Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,

RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.

AS The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our
. . . regular eleven-ounce hexagonal bottle, . . .
you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

'No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

TISSUE BUILDING
BY
BOVININE

is most successful because **BOVININE** supplies absolute and perfect nutrition.

It not only stimulates, but completely feeds the new born blood cells, carrying them to full maturity.

It increases the leucocytes and thereby most powerfully retards pathological processes.

As a food and nutrient it is ideal, requiring little or no digestion, and being at once absorbed and assimilated.

For starving anæmic, bottle-fed babies, its results are immediate and most gratifying, as it is a ready alimentation as soon as ingested, and never causes eructation.

It will be found equally reliable for nursing mothers, affording prompt nourishment and strength to both mother and babe.

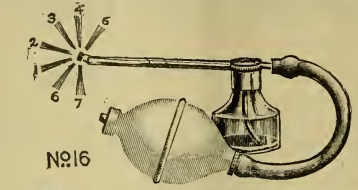
In typhoid fever and all wasting diseases it may be administered per rectum, and will sustain the strength and support the heart without need for recourse to alcoholic stimulants.

Records of hundreds of cases sent on request.

THE BOVININE COMPANY,

75 West Houston Street, NEW YORK.

DeVilbiss Universal Atomizer No. 9. All Metal.—Will throw a spray in any direction desired. Heavy oils and vaseline by heating, light oils and watery solutions without. Can be used with rubber bulb or compressed air. **Price to Physicians, $1 25. Postage 6 cents.**



Two bottles furnished with this instrument. One to be used for water solutions and the other for oil.

The DeVilbiss Universal Atomizer, No. 16.—Unexcelled for patient's own use. **Price to Physicians $1 25** Some of the advantages of the DeVilbiss Universal Atomizers over others are:

1. They throw a spray of any kind of liquid, oils, aqueous or alcoholic solutions.
2. The point can be turned in any direction, consequently it will do the work of three atomizers of any other style without extra tips, which are liable to be lost when you need them most
3. By closing hole in cap on bottle with the finger, a very coarse spray or stream will be thrown which serves to clean it out or can be used for douching
4. Medicine may be mixed in the bottle by closing the hole on cap of point with the finger, and turning on air current or compressing the bulb
5. All parts are interchangeable; any part can be replaced that may be broken or lost
6. Our improved connection enables them to be used with either a bulb or cut-off without extra fittings

DIRECTIONS AND GUARANTEE TO PURCHASER.

To make aceptic, unscrew hard rubber piece, place in a carbolized solution and boil metal part and bottle.

To clean Spray Tube, put cleansing solution in cup, place thumb tightly over hole in cap on bottle and by using air pressure a heavy spray will be thrown from point of tube. Should this fail to clean the tube, unscrew cap "A" and remove particles with a tooth-pick. Be sure to run it through small opening as this must be kept clean in order to have perfect atomization. Should it not work, remove point "C" as shown in illustration with a knife blade; take out all particles with a pin or tooth pick from the openings in the point and replace in the same manner as removed with the letters "UP" on the upper side. Should this fail, return to us and we will repair or replace free of charge.

DeVILBISS MFG. CO., Toledo, Ohio.

PEACOCK'S BROMIDES

PURITY

THE FIRST IS THE CHEAPEST

PEACOCK'S BROMIDES

The Purest Form of Bromides.

Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.

DOSE:

One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA

From Chionanthus Virginica.

Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.

DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges

PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN

PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day. **OD CHEM. CO., NEW YORK.**

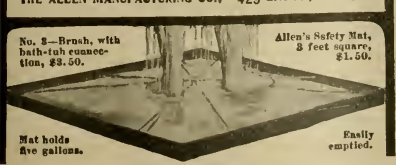
A Bath for Beauty and Health.

Allen's Fountain Brush and Bath Outfit

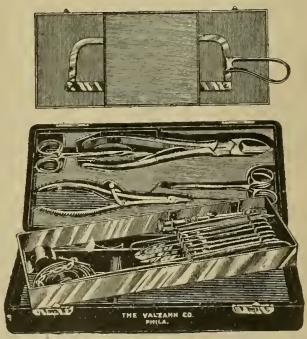
Friction, Shower and **Massage Combined.** The only Sanitary Bath Brush that at one operation thoroughly cleanses the skin, imparting a healthy tone and glow, and puts one in a condition to resist colds, la-grippe and all contagious and infectious diseases. Furnished either for bath tub connection, or with our fountain and Safety Portable Floor Mat. Enabling one to take a perfect spray and frictional bath in any room. With this outfit one is independent of the bath room, as a better bath can be taken with two quarts of water, than with a tub-full the old way. Insures a clear complexion, bright eyes, rosy cheeks, cheerful spirits, sound sleep. Should be in every home, and every travelers trunk or grip. Full outfit No. 2, consisting of Fountain Brush; combination rubber hot water bag; bath fountain and syringe and safety mat. Price $5.50.

Agents are making from $25 to $75 per week selling these outfits. Send for FREE booklet, "The Science of the Bath," prices and terms.

THE ALLEN MANUFACTURING CO., 429 Erie St., Toledo, O.



Valzahn Co.'s Amputating and Trephining Case.



Contents—1 Amputating Knife, 1 Scalpel, 1 Finger Knife, 1 Tenatome, 1 Curved Sharp Bistury, 1 Curved Blunt Bistury, 1 Tenaculum, 1 Grooved Director, 1 Pair Probes, 1 Trephine, 1 Tourniquet, 1 Dressing Forcep, 1 Amputating Saw, 1 Bone Forcep, 1 Needle Holder, 1 Straight Scissor, 1 Curved Scissor, 2 Pean's Haemostatic Forceps, 2 Tait's Haemostatic Forceps, 6 Needles, 1 Card Silk, 1 Coil Silver Wire, 1 Coil Catgut. All in fine Leather Case, $17.00. Knives are in Aluminum Rack removable to facilitate sterilization. **The Valzahn Company,** Manufacturers and Importers of Surgical Implements and Hospital Supplies, 132 South 11th Street, Philadelphia, Pa.

Tonic Beef
S.&D.
A PALATABLE PREDIGESTED READILY ASSIMILABLE NUTRITIVE TONIC & FOOD.
DOSE
FOR ADULTS, HALF TO ONE TABLESPOONFUL EVERY FOUR HOURS AND AT BED TIME. FOR INFANTS AND CHILDREN TEN DROPS TO A TEASPOONFUL ACCORDING TO AGE
MANUFACTURED ONLY BY
SHARP & DOHME
BALTIMORE.

BEEF, WHEAT
AND EGGS

SHARP & DOHME'S

TONIC BEEF

Dose for dose presents

MORE AND BETTER FOOD VALUE

than any other liquid food

PREDIGESTED

PALATABLE PERMANENT

MADE ONLY BY

SHARP & DOHME

BALTIMORE
CHICAGO–NEW ORLEANS–ST. LOUIS
NEW YORK

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

Send for Sample Copy of the

ANNALS OF SURGERY

A Monthly Review of Surgical Science and Practice, Edited by LEWIS STEPHEN PILCHER, M. D., LL.D., of New York. With the Collaboration of J. William White, Ph.D., M. D., of Philadelphia; William MacEwen, M. D., of Glasgow; W. H A. Jacobson, M.Ch., of London.

Each Number Contains Transactions of the Chicago Surgical Society, New York Surgical Society, Philadelphia Academy of Surgery, with original memoirs illustrated by half-tone engravings made from original photographs and drawings. A Monthly Index to Surgical Progress and Review of Home and Foreign Surgical Publications.

Published Monthly by **J. B. Lippincott Company,** Philadelphia, Pa. Great Britain: Cassell & Co., Limited, London. Australasia: Chas. Markell & Co., Sydney, N. S. W.

Price in the United States, $5.00 a year in Advance.

Single Number, 50 cents.

Price in Great Britain and Australasia, One Guinea a year in advance.

Single number, Two Shillings.

Table of Contents.

PAGE

FIFTIETH ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA 261

MISCELLANEOUS 263

ORIGINAL COMMUNICATIONS:

President's Address, Hot Springs, June 2nd, 1903: A W Knox, M. D. 264

Benefits Derived from a County Medical Society: Albert Anderson, M. D. 269

A Consideration of Injuries as Seen in Wood Working Factories: C. A. Julian, M. D. 272

The Normal Saline Solution—Its Physiologic Action and Uses: Geo. P. Edwards, M. D. 276

Some Experiences in Obstetrics—Twenty Cases of Puerperal Eclampsia; The Induction of Premature Labor; Retained Placentæ: L. B. McBrayer, M. D. 280

Questions of the Board of Medical Examiners of the State of North Carolina, Forty-First Annual Session, Hot Springs, N. C., May 27 to June 1, 1903 283

Report of the Board of Medical Examiners to the Medical Society of the State of North Carolina, Hot Springs, N. C., June 3, 1903 286

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL 287

NEWER MATERIA MEDICA 290

REVIEW OF MEDICAL AND SURGICAL PROGRESS 296

BOOK REVIEWS 306

MEDICAL NEWS AND ITEMS 310

Hagee's Cordial Cod Liver Oil
Comp,
Tonic,
Alterative,
Stimulant,
Nutritive,
Reconstructive,
Digestive.
Causes rapid accumulation of flesh and strength, gives tone to the functions of assimilation and secretion, promotes metabolic changes, encourages healthy cell action and excretion.
HAGEE'S CORDIAL contains all the medicinal principles of pure Norwegian Cod Liver Oil without the grease. No decomposed liver tissue. No fishy odor. No eructation. Formula on every bottle.
PRESCRIBE
Cord. Ol. Morrhuae Comp. (Hagee)
and your patients will take it.
Put up in 16 oz. bottles only
KATHARMON CHEMICAL CO.
St. Louis, Mo.
NEVER SOLD IN BULK

Index to Advertisers.

	PAGE
Fairchild Bros. & Foster.....Cover	1
Parke, Davis & Co. ..... "	1
Lambert Pharmacal Co..... "	2
Mr. Fellows..... "	3
The Sanitarium..... "	4
Glycosine Phosphate Co ..... "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.	1
Martin H. Smith Co	2
Broadoaks Sanatorium.....	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.....	5
DeVilbiss Mfg. Co.....	6
Peacock Chemical Co	7
Od Chemical Co.....	7
Allen Mfg Co.....	7
The Valzahn Co.....	7
Sharp & Dohme.....	8
J. B. Lippincott Co	9
Katharmon Chemical Co.....	10
Mariani & Co.	11
The Antikamnia Chemical Co.....	11
Oakland Chemical Co.	12
Battle & Co.	12
University of Pennsylvania	13
The Halcyon Retreat.....	13
Kress & Owen Co.	13
The Purdue Frederick Co.....	14
Rio Chemical Co.	14
Wm. R. Warner & Co.	291
North Carolina Medical College.....	293
Invalids Table Co.	294
The Keeley Institute.....	294
Dad Chemical Co.....	294
Leukretol Chemical Co.	295
H. K. Mulford Co.....	297
The Tilden Co.....	298
Dr. E. R. Russell	299
Dr. A J. Crowell	299
Dr. W. O. Nisbet.....	299
Dr. W. H Wakefield	299
Dr A. M. Whisnant	300
Dr. John R. Irwin.....	300
The Presbyterian Hospital	301
Sultan Drug Co.	301
The Terry Heater Co	302
Robinson-Pettet Co.	303
The Mathewson Laboratory.	304
Clinic Publishing Co.....	305
Jackson Springs.....	307
The Zentmobile.....	308
W. D. Allison Co.....	309
Maplewood Sanatorium.....	309
Munn & Co.....	309
R. L. Polk & Co.....	309
Presbyterian College for Women	310
J. M. Echols Co.	311
N. Y Poly. Med School and Hospital	312
The Charlotte Observer	312
Century Mfg. Co.	312

Written Endorsements From More Than 8000 Physicians.

VIN MARIANI INTRODUCED NEARLY HALF A CENTURY AGO

"The Preparation which made Coca known as a remedy!"

Priority, Facilities and Processes of Manufacture

MAINTAIN MARIANI COCA PREPARATIONS INIMITABLE.

AVOID "COCA WINES" Extemporaneously made with **Cheap Wine and Cocaine**.

Substitutes harm Patient and Physician and betray confidence in the unique properties of Coca

VIN MARIANI

Represents TRUE COCA with a Sound Nutritious FRENCH WINE;

An Adjuvant to all other Remedies in

Convalescence — Wasting Diseases — Neurasthenia

And Allied Conditions from any cause.

THE COCA LEAF

A PERIODICAL ADVOCATING THE RATIONAL USES OF COCA

MAILED FREE TO PHYSICIANS ON REQUEST.

Inquiries from Physicians Receive Ethical Consideration.

MARIANI & CO.,

52 West 15th Street, New York.

PARIS LONDON, BERLIN, MONTREAL. Laboratories: Neuilly Sur-Seine, FRANCE

"Hill's Reference Chart"

DOCTOR: You are entitled to a copy of "Hill's Chart," and if you have not received it, (delivered free of charge), send your name and address to

The ANTIKAMNIA CHEMICAL COMPANY
ST. LOUIS, MO., U. S. A.

And you will get one by return mail!

WHY YOUR CHART MAY HAVE FAILED TO REACH YOU!

"You may have changed your address"
"Your postal card may have gone astray"
"Your Chart may have been lost in transit"

BE SURE TO MENTION THIS JOURNAL

THIS IS THE LABEL

THE KIND THAT KEEPS

BOTTLES DO NOT EXPLODE

Dioxogen

H_2O_2 3%

TRADE H_2O_2 MARK

THE OAKLAND CHEMICAL COMPANY

Formerly known as OAKLAND HYDROGEN DIOXID

A POWERFUL
ANTISEPTIC AND DISINFECTANT
FOR INTERNAL AND EXTERNAL USE
INODOROUS AND HARMLESS

THE OAKLAND CHEMICAL CO.
464 WEST BROADWAY N Y

ECTHOL, NEITHER ALTERATIVE NOR ANTISEPTIC IN THE SENSE IN WHICH THOSE WORDS ARE USUALLY UNDERSTOOD. IT IS ANTI-PURULENT, ANTI-MORBIFIC--A CORRECTOR OF THE DEPRAVED CONDITION OF THE FLUIDS AND TISSUES.

SAMPLE (12-oz.) BOTTLE SENT FREE ON RECEIPT OF 25 CTS.

FORMULA:--Active principles of Echinacia and Thuja.

BROMIDIA
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U.S.A.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

University of Pennsylvania

Department of Medicine.

The 138th Annual Session will begin on he last Friday in September, 1903, at 12 m., nd will end at Commencement, the third Wednesday in June.

The Curriculum is graded, and attendance ıpon four annual sessions is required.

Practical Instruction, including laboratory work in Chemistry, Histology, Osteology, Bacteriology, Pathology, Physiology and Pharmacy, with bedside instruction in Medi ine, Surgery, Gynæcology and Obstetrics, s a part of the regular course, and without dditional expense.

For catalogue and announcement con- aining particulars, apply to

DR. CHAS. H. FRAZIER, Acting Dean,

6th St. and Woodland Ave., Philadelphia.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.

Dr. W. F. Goldsmith, General Surgery.

Dr. C. C. Stockard, General Medicine and Drug Habits.

Dr. S. G. C. Pinckney, Nervous Diseases.

Dr. J. M. Crawford, Eye. Ear, Nose and Throat.

Dr. Michael Hoke, Orthopoedic Surgery.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

7 W. Cain Street, Atlanta, Ga.

THE ALKALINITY OF BLOOD SERUM

GLYCO-THYMOLINE

(KRESS)

ASEPTIC
ALKALINE, ALTERATIVE

A Purgative for Mucous Membrane

INDICATED IN ALL CATARRHAL CONDITIONS

HASTENS RESOLUTION
FOSTERS CELL GROWTH

SAMPLES AND LITERATURE ON APPLICATION

KRESS & OWEN COMPANY, 221 Fulton St., New York.

FIRST OF ALL

insist on rest and freedom
from care; then always prescribe

GRAY'S Glycerine TONIC Comp.

This, authorities state, will,
if persistently followed, overcome
any case of general debility, nervous
exhaustion or neurasthenia.

THE PURDUE FREDERICK CO.,
No. 15 Murray Street. New York.

A Useful Nerve Stimulant and Tonic.

CELERINA is a powerful stimulant WITHOUT the depressing AFTER-EFFECTS of alcohol, caffeine, nitro-glycerine, etc. It is also a reliable Nerve Tonic. A pleasant exhilaration is experienced after a dose of one or more teaspoonfuls, and under its continued use a renewed capacity for mental and physical exertion results. It is indicated in all forms of exhaustion, mental inertia and senile weakness.

DOSE: One or Two Teaspoonfuls Three Times a Day.

A SAMPLE BOTTLE SENT FREE TO ANY
PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

RIO CHEMICAL CO., - - NEW YORK.

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., JUNE, 1903. No. 6

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

Subscription $1.00 per year, in advance.
Subscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
Receipts.—The receipt of all money is immedately acknowledged.
Important Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it coutinued expecting to receive a remittance at their earliest convenience.
We Notify all subscribers when their paid subscription expires.

FIFTIETH ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

This meeting was held in the Mountain Park Hotel, at Hot Springs, June 2-4, 1903, and was a very enjoyable occasion. The attendance was about "normal," the papers abundant and of a high order. The "class" for license numbered 107 (including six osteopathy), and of this number 78 were granted license.

THE CHANGE IN THE CONSTITUTION.

The most important matter that has been before the Society for many years came up at this meeting. We refer to the proposed change in the constitution, as suggested by the American Medical Association. An informal meeting was held on Monday night, June 1st, when the proposed constitution and by-laws were read and discussed. This informal meeting was addressed by Dr. J. N. McCormick, of Bowling Green, Ky., representing the American Medical Association, who pointed out the great good to the profession that would follow the organization under the proposed plan of county medical societies.

On the following day, Tuesday, June 22d, Dr. McCormick addressed the Society on the same subject, elaborating the plan. After full discussion, the new constitution and by-laws, as presented by the committee appointed at the 1902 metting, was adopted. (We will give these in full in the July number.)

THE HOOKWORM DISEASE.

The most interesting address made before the Society was that of Dr. Chas. Wardell Stiles, Ph. D., of the Marine Hospital Service, and Chief of Division of Zoology.

Dr. Stiles having become convinced by theoretical deductions that hookworm disease (uncinariasis) must be more or less prevalent in the South, a trip was made from Washington, D. C., to Ocala, Fla., stopping at penitentiaries, mines, farms, asylums, schools and factories, and the fact was established that the chief anemia of the Southern rural *sand* districts is due to uncinariasis, while clay districts and cities are not favorable to the development of this disease. In the old world, hookworm

disease was probably known to the Egyptians nearly 3,500 years ago, but its cause was not understood until the middle of the Nineteenth century, when it was shown to be due to the presence in the bowel of an intestinal parasite, *agchylostoma duodenale*. Until 1893 no authentic case of this disease was recognized in the United States, but between 1893 and 1902 about thirty-five cases have been diagnosed, and in 1902 it was shown that a distinct horkworm, Uncinaria Americana, was the cause of the disease, which has been known in the South for years and can be traced in medical writings as far back as 1818, but its nature was not understood, the cause being attributed to malaria or to dirt eating.

The doctor presented the Society with specimens of the American hookworm, which is about half an inch in length. The parasite lives in the small intestine, where it sucks blood, produces minute hemorrhages and in all probability produces a toxine. The eggs of this parasite cannot develop to maturity in the intestine. The ova escape with the feces and hatch in about 24 hours. Infection takes place through the mouth—usually by infected food or filthy hands.

Infection occurs chiefly in the rural sand districts.

External Appearance of Sufferer from Hookworm Disease.—In extreme cases there is a general lack of development; skin waxy, white to yellow or tan; hair is found on the head, but is more or less absent from the body; breasts are undeveloped; nails white; external genitalia more or less rudimentary; face anxious, may be bloated; conjunctivae pale, eyes more or less dry, pupil dilates readily; teeth often irregular; cervical pulsations pronounced, thorax emaciated; "pot belly" abdomen; extremitus emaciated, frequently edematous, and with wounds and ulcers of long standing.

Diagnosis.—This is easily made by means of the miscroscope, the eggs being readily found in the feces if present.

Treatment.—The two drugs most commonly used in uncinariasis are thymol and male ferm. In using thymol the patient is put on milk diet for a day and at 8 a. m., 30 grains of thymol are given; the dose is repeated at 10 a. m.; castor oil or magnesia at 12 noon.

In a week the fecal matter is again examined for eggs and the thymol used again if they are found.

It is best not to administer thymol in these doses oftener than once weekly, but the treatment must be continued weekly until no eggs appear in the stools.

We regard this discovery of hookworm disease by Dr. Stiles as of tremendous importance to our Southland, and will present our readers with reports of cases and full particulars regarding treatment and prevention in the near future.

The Society adjourned Thursday at noon to meet in Raleigh in 1904.

The officers elected for the following year are:

President—Dr. H. B. Weaver, Asheville.

First Vice President—Dr. J. W. Long, Salisbury.

Second Vice President—Dr. John C. Rodman, Washington.

Third Vice President—Dr. S. F. Pfohl, Winston-Salem.

Secretary—Dr. J. H. Way, Waynesville.

Treasurer—Dr. Sikes, Grissom.

Under the new constitution adopted at this meeting the State is divided into districts corresponding with the Con-

gressional districts, and councellors were appointed to serve these districts for one year, as follows:

1. District Councillor, Rod McMullin, Elizabeth City.
2. D. D. Tayloe, Washington.
3. F. H. Russell, Wilmington.
4. Albert Anderson, Wilson.
5. J. F. Highsmith, Fayetteville.
6. H. A. Royster, Raleigh.
7. E. C. Register, Charlotte.
8. H. S. Lott, Winston.
9. T. E. Anderson, Statesville.
10. J. A. Burroughs.

MISCELLANEOUS.

Case of Foreign Body in the Intestine.—At a recent meeting of the New York Academy of Medicine, L. Emmet Holt (reported in *Medical Record*, January 3, 1903) described this case:

The patient was a child of six months, the son of a physician. He was in the habit of swallowing foreign bodies. Early in June he had an attack of measles, and after the temperature had fallen as usual, it rose again, and he developed an acute mastoiditis. The ears were punctured, but the temperature remained between normal and 106 degrees F. for several weeks. The child recovered without a diagnosis having been made. The temperature would remain normal until noon or 3 p. m., and then would rise rapidly almost to 106 degrees. The father made innumerable blood examinations, but malaria was excluded. The lungs were absolutely normal throughout the attack. In the third week of the attack the child was found one morning cyanosed and struggling. It had been playing with a paper of safety-pins a few minutes before. The trained nurse entered the room at this time and removed a handful of pins from the mouth, but it was certain at the time that at least one pin had been swallowed. This was on July 5th, and on July 10th the mother reported that three safety pins had been discharged from the rectum, including one which was bent like a fish-hook. The child then had a large constipated movement, and although the trained nurse insisted that it was free from pins, the mother examined the stool very carefully, and was rewarded for her trouble by finding more safety pins.

Dr. Holt also referred to the case of the child who had been playing with a set of toys, and as a result had swallowed a sugar-tongs, about one and a half inches long, and a knife, which was a little longer. This emphasizes the necessity for great care in selecting for little children toys having parts which cannot be loosened and swallowed. The speaker said that he had made an autopsy on a child some years ago, and had found a safety-pin impacted in the larynx. It had apparently caused death.

We wish to solicit from our readers, reports of unusual or interesting cases, too brief perhaps, for a completely written paper, but suitable for recording under "Clinical Notes." Many matters of value to the profession can thus easily be recorded which otherwise will be neglected and never become available for further reference. We wish our pages to be utilized for whatever will be of benefit to the profession.

The Carolina Medical Journal

COLLABORATORS.

H. T. Bahnson, M. D., Salem, N. C.
J. Howell Way, M. D., Waynesville, N. C.
J. Allison Hodges, M D., Richmond, Va.
S. Westry Battle, M. D , Asheville, N. C.
Geo. G. Thomas, M. D., Wilmington, N. C.
J. P. Munroe, M. D., Davidson, N. C.
Manning Simons, M D., Charleston, S. C.
S. C. Baker, M. D., Sumter, S. C.
R. L. Payne, M. D., Norfolk, Va.
H. S. Lott, M. D., Winston, N. C.
J. W. Long, D. D , Salisbury, N. C.
H. A. Royster, M. D , Raleigh, N. C.
Albert Anderson, M. D., Wilson, N. C.
Francis L. Parker, M. D., Charleston, S. C.
Chas. W Kollock, M. D., Charleston, S. C.
Davis Furman, M. D., Greenville, S. C.
F. Julian Carroll, Summerville, S. C.
Translation and Foreign Reviews, Richard H. Whitehead, M. D., Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.

Contributors for the Original Department of The Journal are received, with the understanding that they are contributed exclusively to this Journal.

Illustrations necessary to elucidate the text will be provided without expense to authors when suitable ink drawings or photographs are furnished.

Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

President's Address, Hot Springs, June 2nd, 1903.

By Dr. A. W. Knox, Raleigh, N. C.

Gentlemen of the Medical Society of the State of North Carolina:

We enter today upon the fiftieth annual meeting of our Society, and celebrate the fifty-fourth anniversary of its organization.

We have passed the mile-stone which marks the recession of half a hundred years into the growing shadows of the past; and what could be more helpful to the uplift of our mental vision than the simple fact that we have met upon the mountain tops, from whose noble elevation we may look outward over an ever-expanding horizon and gather inspiration from the grandeur and sublimity about us, which clothes the face of Nature in eternal peace and calm. Let us yield ourselves wholly to the suggestions of our environments, enjoying to the utmost this week of respite from all toils and cares to which we must soon return.

'Tis a gladsome thing to look once more into your genial, kindly faces, and it stirs the cockles of my heart to grasp again the hands of so many medical brethren and friends.

During the year just closed several notable events of interest to this Society have transpired:

At the August term of the Superior Court of Moore County, Harry McKnight, an osteopath, was indicted for practicing medicine without license. He was acquitted on the ground that his treatment of patients did not consist in the administration of drugs or medicines, "and that the only surgery he practiced was without fee or reward, an act of charity, and that was incidental and not in the usual course of the practice of osteopathy." The case went to the Supreme Court on appeal, and the judgment of the town court was sustained, Justice Walter Clark writing the Court's decision, which he closed as follows: "All that the Courts can declare, upon the facts found in the spe-

cial verdict is, that the defendant's practice is not the practice of medicine or surgery, and no license from the Medical Board of Examiners is required. No error."

This decision was a great disappointment to the profession throughout the State; but it showed a defect in the law as it stood, and in the hope of curing that defect, a bill entitled "An Act to Define the Practice of Medicine and Surgery," was introduced in the last General Assembly. This bill carried an amendment, which if enacted into law, would have excluded from practice in North Carolina both osteopaths and Christian Scientists. It was favorably reported by the joint committee on public health; but, in its final passage, was sapped of its vitality by the lukewarmness towards Christian Scientists on the part of its introducer, who declared that he did not believe in "fighting a sentiment."

As finally passed, the amendment reads as follows:

"For the purposes of this act, the expression, 'practice of medicine and surgery,' shall be constructed to mean the management or treatment, for fee or reward, of any case of disease, physical or mental, real or imaginary, with or without drugs, surgical operation, surgical or mechanical application, or by any other method whatsoever; *provided,* that this act shall not apply to midwives nor to nurses; *provided further,* that applicants not belonging to the regular school of medicine shall not be required to stand an examination except upon the branches taught in their regular colleges, to-wit., the Osteopaths shall be examined only upon Descriptive Anatomy, General Chemistry, Histology, Physiology, Urinalysis and Toxicology, Hygiene, Regional Anatomy, Pathology, Neurology, Surgery, Applied Anatomy, Bacteriology, Gynaecology, Obstetrics and Physical Diagnosis; *provided,* that this act shall not apply to any person who ministers to or cares for the sick or suffering by prayer to Almighty God without the use of any drug or material means."

Despite the failure of the original amendment, as proposed, this Society owes a debt of gratitude to the able and indefatigable secretary of the State Board of Health, Dr. R. H. Lewis, for the masterful fight he made for it against tremendous odds. You will find, in the February number of the Bulletin of the North Carolina Board of Health, an excellent resume of his admirable argument in favor of the original bill, which I commend to your attention as a terse and vigorous statement of this aspect of the history of our medical laws.

On the 29th of October last, Senator Ransom delivered an eloquent address on the life and character of our beloved friend and former President, the late Dr. Chas. J. O'Hagan. It was a noble tribute to a great hearted, splendid leader of this Society and the profession, and I recommend that you adopt a resolution instructing the secretary to request of Senator Ransom a copy of that eulogy for publication in our transactions, in order that it may be preserved as a part of our records.

[The President's address was so lengthy that we found it necessary, from this point, to present our readers with an abstract of the remainder.—EDITOR.]

At the New Orleans meeting of the American Medical Association last month, the Revised Code of Ethics, as presented by the Committee on Medical Ethics, was unanimously adopted. As it now stands, the word "Code" is eliminated, and it is now promulgated by

the American Medical Association "as a suggestive and advisory document," under the caption, "Principles of Medical Ethics." In reference to this change, the committee reports as follows:

"That such action is based on the idea that the American Medical Association may be conceived to occupy some such relation to the constituent State Associations as the United States, through its constitution, holds to the several States. The committee, for this reason, regards it as wiser to formulate the *principles* of medical ethics, without definite reference to 'Code' of penalties, thus leaving the respective State to form such code and establish such rules as they may regard to be fitting and proper for regulating the professional conduct of their members, provided, of course, that in doing so there shall be no infringement on the established ethical principles of this Association."

Summed up in a phrase, by Dr. Jos. D. Bryant, a delegate from New York, the revised code is "an expression of opinion as to what a medical gentleman should be."

And now, gentlemen, I come to a subject which, in my opinion, is the *most* important one you have had to act upon in years, to-wit., the proposed reorganization of this Society in conformity with the general plan recommended by the American Medical Association for adoption by *all* State and Territorial Medical Societies in the United States.

At the Wilmington meeting a year ago, a special committee was appointed to draft a Constitution and By-Laws along the lines laid down by the American Medical Association and report at this meeting of the Society.

In order to disseminate as widely as possible among our members a detailed acquaintance with all that is proposed by the National Association, I, in April last, requested Dr. J. N. McCormack, representative on organization of the American Medical Association, to mail to 100 members of this Society, representing the different sections of the State, a copy of the able pamphlet on "Organization of the Medical Profession," by Dr. George H. Simmons, the Secretary of the American Medical Association, and also one copy each of the Constitution and By-Laws for State Societies and of the Constitution and By-Laws for County Societies.

I earnestly desire to bring this matter before you in the strongest and clearest way possible. I have, therefore, put aside the very natural and human wish to present you an *original* address of my own on this subject, and I now adopt instead, and make it a part of my annual message, the identical language of Dr. Simmons in parts of his paper on "Organization." I do this because he and the committee he speaks for have given months of exhaustive study to the matter in all its bearings, and have grouped together the *reasons* for organization in a strong and logical way, which, in my judgment, could not be improved upon.

"The avowed objects and principles of the American Medical Association are:

"To federate into one compact organization the medical profession of the United States, for the purpose of fostering the growth and diffusion of medical knowledge, of promoting friendly intercourse among American physicians, of safe-guarding the material interests of the medical profession, of elevating the standard of medical education, of securing the enactment and enforcement of medical laws, of en-

lightening and directing public opinion in regard to the broad problems of State medicine, and of representing to the world the practical accomplishments of scientific medicine." (Article 2d of the Constitution of the American Medical Association.)

WHAT THE AMERICAN MEDICAL ASSOCIATION ASKS OF THE STATE SOCIETIES.

The following resolutions, among others, recommended by the Committee on Reorganization, were adopted at the last meeting of the American Medical Association:

c. That the State Societies unitedly agree to federate themselves in the American Medical Association, and as a preliminary to this adopt a uniform organic law in regard to certain fundamental principles, viz., to divide their annual sessions into two branches, legislative and scientific; the legislative branch to be as small as is compatible with representation from all the county societies, and to be composed of delegates elected by the county societies.

d. That membership in the county or district societies shall constitute membership in the respective State Society without further dues, and that no one be admitted to membership in the State Society except through the county or regular district societies.

e. That funds to meet the expenses of the State Society be raised by a per capita assessment on the county and district societies.

f. That a united effort be made to influence special societies to limit their membership to those who support the regular organization, and the semi-national and miscellaneous societies to encourage systematic organization, by covering a definite territory and also by limiting their membership to supporters of the regular organization.

g. That each State Society create a permanent committee and a fund for the purpose of enforcing all medical laws in every part of its territory.

h. That each State Society co-operate with the American Medical Association and each of the other State Societies in solving the problems now before the profession, relating to medical education, medical legislation, reciprocity, licensing, etc.

An analysis of these resolutions show that the American Medical Association requests the following:

1. The Federation of all State Associations in the American Medical Association.

2. That all associations adopt a uniform plan of organization as regards certain fundamental principles.

3. That each State Association have two distinct branches, Legislative and Scientific.

4. That the Legislative branch be as small as compatible with representation from all county societies in the State or Territory, and to be composed of delegates elected by the county (or district) societies, or as stated in the resolution: "Membership in the county or district society shall constitute membership in the respective State societies without further dues, and that no one be admitted to membership in the State Society except through county or regular district societies."

FEDERATION OF THE STATE SOCIETIES IN THE AMERICAN MEDICAL ASSOCIATION.

"In asking the various State Societies to federate or unite in the American Medical Association, the latter is practically saying to them: 'All of you join together, through representatives, and thus united, be the American Medical Association. Each of you come, stat-

ing your needs and your views on the problems that affect the health of the people and the welfare of the profession. With your combined wisdom, consider what can be done to eradicate the evils from which the profession is suffering, both from within and from without, and how the science and art of medicine can be hereafter applied in the interest of the health of the people.' "

In the future, by this federation, the legislative body of the American Medical Association will be *what the State Societies make it; and those who compose it will be the mouthpiece of those they represent, to give expression to their views and their desires.* There is no doubt but that when the new conditions, with all their possibilities, are *appreciated,* the important questions brought before the House of Delegates will have been previously considered and acted on by the legislative bodies of the State Societies, and the representatives of such bodies will, therefore, bear a definite message on such important subjects to the national gathering. Thus will be developed and encouraged in the annual sessions of the State bodies a lively interest in affairs of national importance which relate to the health of the people and the welfare of the profession.

It is a historical fact, not without interest in this connection, that in the first constitution of this Society, adopted April 17, 1849, provision was made for County Medical Societies, whose members were *ipso facto* members of the State Society, and also for delegates from County Societies to the State Society, thus emprasizing the principle of representation of the whole profession in the parent organization. Likewise, annual assessments were laid upon all members of County Societies to meet the expenses of the State Society; and annual reports were required from the County Societies to the State organization. So that we will, after all, be only returning to first principles if we shall adopt this proposed plan of organization. Thus we see that here again North Carolina was *among the first* to mark out the path of progress, as she was, indeed, the *very first* to establish a State Medical Examining Board, and *prima inter pares* in the matter of enacting advanced medical laws.

True, our original plan was allowed to lapse into a sort of "innocuous desuetude," but two of our former presidents, Joseph Graham, in 1886, and H. T. Bahnson, in 1887, sought strenuously in their annual messages to hark us back to the main track.

It is my firm conviction that this Society should adopt the Constitution and By-Laws for State Societies and the Constitution and By-Laws for County Societies as nearly as possible in the identical forms proposed by the American Medical Association, making only such *necessary* modifications as may be demanded by our peculiar environment. *Unnecessary* modifications—however *slight* they may appear to be—should be avoided. For, once begun, they lead almost inevitably to more and more *radical* alterations, and so transform the originals into documents entirely different from those intended and proposed. Witness the experience of Missouri and Illinois as stated by Dr. McCormack.

And now, gentlemen, I commit to you for action this truly *momentous* question. Upon your decision of it, in my judgment, hangs the welfare—or illfare—of this Society. I bespeak for it, therefore, your most earnest and thoughtful consideration, with the con-

fident assurance that your determination of it will be both deliberate, unselfish and wise.

If I shall have been instrumental in helping you to that decision, it will be to me a source of lasting satisfaction and pride.

I thank you, gentlemen, for your generous confidence, manifested in your bestowal upon me without my seeking it, the highest honor within your gift. I have no experience in presiding over deliberations, but I confidently count upon your generous patience and assistance in my conduct of the important duties which lie before us.

Benefits Derived from a County Medical Society.*

By Dr. Albert Anderson, Wilson, N. C

For a profession or an institution to succeed it must be based upon correct principles. We have based our profession on a code of ethics, but we have not built our superstructure on this basis. Our building in many respects is out of harmony with the principles of our code, and hence through the ages we have been shorn of our strength in making ourselves felt among the people in obedience, honor, respect and reputation. Our greatness has been individual, not collective. "United we stand, divided we fall," seems never to have entered into our plans of self preservation. Could we plant and fructify this truism in the minds of North Carolina doctors, we would soon have a good medical society in every county, and these county societies would make an ideal State society. As to my personal experience I owe perhaps more to medical society meetings than to all other sources for the medical knowledge I now have.

The first prerequisite to obtain ability or power to do a thing is the birth of a desire. At our county, State and national meetings desires are born and ambition aroused that stimulate a growth of character and ability and the fraternal relations which lighten the burdens of life and increase our joys.

Isolate a man or woman from human society and his or her desires become fewer as the duration of such isolation continues. Ambition for larger fields of usefulness—for more power to do things—is a stranger to such a soul. The same is true of a doctor, and we have seen it verified in many instances.

Start him out in the world with a good medical and surgical education and let him dissociate himself with medical men all his life and that doctor soon begins process of degeneration in every mental and moral fibre of his professional nature till he degenerates into a veritable quack and ignoramus. This is the inevitable tendency by nature as observed both in animal and vegetable life.

All life that develops must have nourishment, and that one great necessity must come from some external source. But there is a best way of taking in and utilizing this nourishment. And any other ways lead to indigestion and malassimilation. The physician can nourish his brain by reading and discussing with others medical subjects. Reading is a passive exercise; when done in a hurry, tends to mental indigestion and produces in many of us a flow of words and a pacity of ideas; while reading, reflecting and discussing medical subjects is an active mental gymnastics that gives proper digestion and assimilation and classification of facts, data and for-

*Presented to the Medical Society of the State of North Carolina at the meeting at Hot Springs, June 2-5, 1903.

mala for ready and accurate use in emergencies and grave diseases. We see these results in so-called great scholars of all profession who write volumes without ideas which are hard to find publishers and harder still to find readers. Such work is theoretical—not practical and experimental. Every theory or doctrine is a dead formala that does not come through practical experiment.

A doctor writes a paper for publication—you read it and do not get his meaning. Let him read the same paper before a society of his fellows and his words and expressions spoken and seen bring out a meaning the cold print will not, and a review and discussion of the same will develop its truths and eliminate its errors. So this suggests the figure of sifting the grain to separate the chaff from the wheat, the hulls from the peas, the dirt and other impurities from the solid grain. This truth has been established not only in medicine, but in religion, so that Christian experiences interchanged among members of the same church clarify the spiritual visions, strengthen faith and brighten hopes.

There are 120,000 physicians approximately in the United States. Of this number there are 70,000 licensed practicioners who are not members of any medical organization, county, State or national. To have a united medical profession thoroughly organized and loyal to the fundamental principles of an high calling, is perhaps an Utopian dream that will never come to pass.

But the third of our profession who are organized with enthusiasm and zeal, can do much, and are doing a great deal to bring within our membership all those who are worthy by overcoming the apathy, indifference and ignorance of the practical value of membership of the two-thirds. How to reach those outside ones and bring them into harmony is the duty of the hour. There is only one way to perform this duty—"to carry the gospel to the Gentiles." Put a medical society in every county of the State, the membership in which will be the credentials to pass into the State society. Let the county societies look to the ingathering of all worthy medical men and leave out the unworthy, irregulars and quacks. As it is now we often see a member of our State society who can not enter a county society upon merit, and proceeds to violate every code of honor and every principle of business. Once established and in good working order, a county medical society is bound to succeed. With our experience of the benefits which have come to us through our regular and irregular meetings of the Wilson County Medical Society for the last 12 or 15 years, how could we feel at ease in conscience or mind to let our society die?

To reach the highest standard in medicine we must have the personal teaching of one doctor by another. We cannot get the same knowledge from verbal description of books and Journal articles. So it has been the habit of some of our men to make trips to New York and other places to learn new methods by coming in personal contact with our brightest men. When such ones return home there is a new impulse given to fellow members of a county society by the personal description and explanation of what he has seen and heard.

In all associations of men we know the strong will help the weak, "the potential members will give the aid that one needs and the other possesses." Any

doctor who is alive to the importance of his work cannot spend an hour in discussing a medical topic with brother doctors without reward, large or small.

Medical sociology is therefore a study worthy of earnest consideration, and such consideration will create the enthusiasm and zeal of a religious missionary who dares to do or die in his efforts to spread the knowledge of the Book of books among those unacquainted with its saving and civilizing power.

Indolence and indifference are two characteristics of doctors. We can eradicate the first by organization, in which desires are born for better things and ambition is stirred to excell. The latter is overcome by comparison between the indifferent and earnest workers, the latter outdistancing the former in knowledge and finance. Make our societies perform their full functions as organizations representing the medical body politic, and as such conduct them for the best interest of our members. I am glad to say that we in Wilson county are not guilty of the narrowness and exclusiveness that prevails in some communities against the young doctor. Fresh from college the young graduate is theoretical more than practical, and he feels that he stands in need of knowledge that comes from experience (and he does), and this he can find in home medical societies. If he is met at the threshold of his profession by coldness and exclusiveness from those established in practice, he may, (the chances that he will) drop into quack ways and disobey our code's teachings until he forgets there is a code. He brings dishonor upon a noble profession and a disintegration as far as his influence extends, and the whole medical fraternity feels the shock. We have tried in every instance to incorporate within our society these young men, but have failed because of outside influences. Great is our loss and tenfold greater is theirs, because in time they will lose all interest in medical topics—respect for professional honor and integrity and all that will actuate them in their work will be a commercial spirit which alone is a vampire upon their professional life that will suck all the blood from them and leave them a dry rot.

Physicians need advice and help as no other men do. I quote: "Although physicians need this, we often find that where there are but two doctors in a community this spirit of envy and contention pitched upon the lowest possible plane, so divides them and infects the community as to be utterly destructive of that public respect and confidence to which both are perhaps equally entitled. We find them quarrel about patients who would not pay either of them if they could, or about provisions of the code which neither of them have read, that one is afraid to collect his just fees for fear the other will get some of his offended patons, that ambition for surgery or other work is hindered by the fact that one will send for consultation, or send his patients, to a distant town or city rather than ask the assistance of his neighbor; in a word, this curse which clings to our profession with such tenacity and blights all to which it clings, bars all advancement and destroys ideals of professional life."

With such environment our horizon grows smaller and smaller with the years until we drop out of the race and become the unkempt and self-satisfied medical degenerate only too frequently to be found without search. We are thankful that to some unknown source we have overcome partially these environments in our county. If we could

have organized our medical men years ago into a monthly medical society, today we would be the chief centre of the profession, many fold greater in professional and mental ability and incomes contributed to by different parts of the State. United we stand first—divided we may come last. A union of State, county and national associations would make us invincible to foes of disease, ignorance of the laity, quackery in its hydroheaded manipulation, so damnable to the welfare of the people, and such a thief to their pockets.

Disease, ignorance and quackery are hard foes to conquer, and the experience of the past tells us in thundering tones the battle cannot be won upon the old lines. Reorganized! It is the only thing to do if we expect to win our way to influence, effectiveness and power, in law and with the people. The important work which ought to be started at once is to stop at the threshhold of college those unqualified in any way—especially by deficient education.

Medical institutions are getting on a higher plane, forced there by State boards of medical examiners. And through the same power lower grades are being destroyed.

A Consideration of Injuries as Seen in Wood Working Factories.*

By Dr. C A. Julian, of Thomasville, N. C

I have been invited by the chairman of the section on Anatomy and Surgery to present to the Society a paper on the above subject for two reasons; first, on account of my opportunity for observation, and because it is one of wide interest to the profession to-day in North Carolina. This subject is opportune because our State is fast changing from an agricultural to a manufacturing section, and over her entire area is found every conceivable form of wood working machinery; but it is with reluctance and misgivings that I attempt the preparation at all, not having felt that I could embellish the subject with literary merit such as would be fitting to present to so cultured an audience. However, my experience in this class of surgical cases has been large enough to emphasize the difficulties and the importance of the subject. If you care to hear from me at all, you care only for my personal experience and observation, not for the gathering of the wisdom of others. Few subjects in the whole domain of surgery, in my opinion, require more careful consideration. Conditions so far reaching in their effects, so disastrous in their results to a certain class. These injuries are attributable to recent inventions and the introduction of powerful machinery moving with terrible velocity.

Factory injuries constitute by far the largest class of traumata with which we have to deal today, and modern surgery is teaching a conservatism which saves both lives and limbs. Especial qualifications are needed for this work—confessor, attorney, judge and surgeon. The diminutive attornies pillage your cases, debauch their profession and hurry to the scene of accident in fustian style to blacken and make culpable and take under consideration in their artful way the amount of damages to be procured. Here is where conscience, not deceit; honesty, not pretension; conservatism, not display, should be our rule and guide.

Shall we stoop to gain the commendation of the curious in the bombastic ex-

*Presented to the Medical Society of the State of North Carolina at the meeting at Hot Springs, June 2-5, 1903.

hibit of shining instruments and surgical temerity in the sacrifice of tissue that is so useful and so much needed in winning bread for the honest toiler, or shall we rise above the groveling and merit the reputation of conservatism instead of demonstrating how much we can sacrifice in a given time? Nothing brings so much dishonor on our profession, nothing so much disgraces the individual practitioner. The old adage that "dead men tell no tales" is true, but maimed live men are often the everlasting monuments of our work.

I cannot entertain those who have had comprehensive experience nor those who imagine the subject old and stale, but I am writing for men, old and young, who alike have felt, especially in emergency, when confronted with grave and serious cases and thrown wholly on their own resources, the gravity of their position, the greatness of their responsibility when the life or limb of a fellow-being is at stake. I feel that but too often the knife has been wielded with a want of prudence that is simply disgraceful. We must be positive as to the extent of the injury before we determine what to do in a grave injury. This cannot be determined immediately in very many cases; we may be misled in the selection of the proper site for operation when the patient is under profound systemic shock. Tissues apparently dead may, if time be allowed, show a recurrence of vitality. On the other hand, time may prove devitalization of tissues which had at first seemed uninjured. You cannot determine after these injuries immediately between actually devitalized tissues and those in which the condition is due to "local shock." In the severe crushing injuries, such as those received by belts and pulleys, hydraulic presses, embossing machines, veneer, etc., there is invariably devitalization to a point more or less remote from the actual site, often at a great distance from it. How far this devitalization extends cannot primarily be determined.

Immediate amputation will result in one of two things, either you will cut too low or too high. If too high, you will needlessly sacrifice what might prove a useful portion of a limb; if too low, the stump will slough, the bone will be left projecting and another amputation will become necessary.

I will not theorize on shock, but when the injury is extensive, I do not favor immediate operation. When there is no longer perceptible shock I operate. Some time since I was called to a veneer factory where a young white man had been caught by the tail of his coat in the large cog wheels that turn the powerful machine. In trying to extricate the coat, his elbow was drawn into the cogs, one-half of the forearm and the upper part of the arm to within three inches of the shoulder joint was ground into pulp. Instinctively he tried to wrench his arm from the grasp of the cogs, but the great muscular effort he put forth only intensified the injury, and in freeing himself tore the arm into shreds. I made him comfortable, applied the tourniquet, injected one quart of saline solution into his rectum, gave him hypodermics of strychnia and atropine, and nine hours afterward amputated near the shoulder joint. The mangled parts were filled with grease, dirt and shreds of clothing. The operation consisted in dissecting up a cuff until I found solid tissue. I then irrigated, scrubbed the cuff, fashioned it with scissors, sutured it closely, dressed with 10 per cent. iodoform gauze, and my patient made a rapid recovery by

first intention, without any fever and with only one dressing of the stump.

This case is given in support of my views as to the time for the operation and the selection of the proper site. I will not pretend to inform you of the precise pathology of shock, but whatever may be the exact rationale of its production, it is the result of injury, and I can't believe that imposition of supplemental injury by amputation portends to the betterment of the patient's condition during this period of depression. With so much exhaustion already and with the supplemental injury by amputation and depression caused by the anesthetic, the immediate operation cannot do less than augment the already existing exhaustion. In the case cited, immediate amputation would have resulted in the shoulder joint operation, but in waiting, enough tissue regained its healthful color and normal temperature to avoid it.

Various causes conduce to injuries of the fingers and hands more frequently than any other part of the body in these wood working factories. My object is, therefore, to beg for a conservatism in these minor operations. The very first duty is to reduce the effect of the injury. In every injury to the hand, no matter how serious, no matter what structures are involved, if there be good circulation, we should be very cautious about operating. On the other hand, of course too great an attempt at conservatism is unwise. It is not wise to save a finger that is forever in the way. Upon our common sense, skill and judgment, will, in many cases, depend the result, influenced as it must be by the decision of a moment, but from the importance of the hand and because this member possesses a peculiar virtue, it is of paramount importance to preserve even small portions of a phalanx.

I have selected a few cases as they occur to me from actual experience.

Case I.—H. B., owner of a small buggy shop, injured by attempting to dress very thin plank for a boot in a dull jointer. The first, second and third fingers were lacerated and bones broken into fragments. The thumb and fourth finger were badly lacerated and a deep flap was torn from the side of the hand and out the entire length of the fourth finger. The hand was covered with dirt and grease and presented a shapeless appearance. I explained to the patient the almost futile hopelessness of trying to save any of the fingers, but he begged for the thumb and fourth finger, the others being torn and ground into pulp. The hand was made aseptic, instruments also. I amputated the first, second and third fingers, removed spiculæ of bone from the thumb and fourth finger, approximated intact fragments, re-invested the fingers of their integument, or as much as could be used. Seventeen catgut sutures were required for the fourth finger and several for the thumb to patch up the ragged edges. A dry dressing was used and not repeated for four days. The eighth day lymphangites supervened, redness and heat extended over the whole hand, wrist and greater part of forearm. The formation of pus was frightful, the remaining fingers became blue and the hand presented a dirty, blackish look. I made long incisions throughout the hand, employed ten minute submersions of the hand in a solution of creolin 1 to 200 every few hours, copious antiseptic wet dressings being used in the interval. After that, I kept the area thickly coat-

ed with ichthyol ointment and in eight weeks discharged the patient with two whole fingers and a good hand. There were times when it looked like recklessness to leave such a mass attached to a human being's arm, but I now present to you a very useful, if not a very shapely, hand.

Case II.—E. L., under foreman, chair factory, working a boring machine, instead of boring a chair post the bit entered his hand near fourth finger; in trying to extricate it he jagged the bit into the fourth finger, puncturing the bone and grinding it nearly to second joint. This was very difficult to treat. The extent of damages was hidden from view and the very character of the injury, as can be readily understood, implied at least the possibility of deep-seated inflammation. Foreign matter was carried into the joints, and to let the finger remain intact I feared serious consequences would supervene. The patient wanted his finger, so I carefully searched the wound, cleaned it and encouraged repair by adhesion. He now has a very useful hand.

Cace III.—W. DeH., a latheman with only one hand, was adjusting back knife when his only remaining hand was caught and three fingers split open. The bones were badly fractured, and the fragments displaced. Irrigated with bichloride solution, replaced fragments of bones, used dry gauze dressing. Result, recovery with restoration of function.

Case IV.—E. M., rounding corners of chair seat on shaper, let his right hand follow into the knife and it shaped two fingers in the very latest and most modern style, making them look like wedges with base at the hand and edge at tip of fingers. Amputated at the first joint and let the fingers round by granulation.

Case V.—T. W., division foreman, wagon factory. Showing new employe how to manipulate double saw for equalizing spokes, in making some emphatic gestures with his right hand, one of the saws caught his thumb, second, third and fourth fingers, sawing them into long shreds. Amputation of all four fingers seemed to be the only rational measure, but they were cleaned, the parts of bone and other tissues were placed in good position, the thumb amputated between the second and third joints, dissected down to the first joint of second and third fingers and covered with circular flap. The fourth finger was dressed and splinted in a slightly flexed position; result was good.

I could claim your attention with case after case, but the report is already too extended.

No one reveres the art of surgery more than I do; I am proud of the successes in this branch; I honor the man who performs his duty, and admire the daring surgeon who has the courage to wield his knife for the benefit of humanity. I do not take to ultra conservatism or the rhapsodical fancies of the disciples of Christian Science, but that in discovering a clearer and deeper meaning.

Those surgeons who are devoting their lives and best energies to its advancement can take comfort in the conviction that their efforts have not been in vain and justly cherish the hope that what has been given in the past is only a small boon compared with the vast wealth of benefit to humanity which the future will bestow. What I protest against is the indiscriminate operating, against the extremist who does not temper his thirst for notoriety with common sense. I believe in conservatism, in the employment of surgical treatment

with the aim of preserving and rendering serviceable a part, rather than removing it.

The Normal Saline Solution — Its Physiologic Action and Uses.*

By Geo. P. Edwards, M. D , Sylva, N. C.

Whenever there has been any considerable loss of blood from any cause, such as during or after surgical operations, or in post partum hemorrhage, it is always desirable, and many times imperative that the lost fluid be replaced by another fluid in order that the normal quantity of circulating fluid may be maintained.

It has been shown, according to Pye-Smith, that in hemorrhage the real cause of death is a mechanical one and consists in the loss of volume of the circulating medium which must, within certain limits, be proportional to the capacity of the vascular system.

Hunter states that the immediate source of danger from sudden loss of blood is the fall of blood pressure to a point where the circulation cannot be maintained.

After profuse hemorrhage the dominating and all-important indication is to restore the volume of circulating fluid.

For years the transfusion of human blood was the method resorted to in these cases. But this procedure was attended with so much danger and inconvenience, that it has been almost altogether displaced by the use of the normal salt solution, which is simple and perfectly safe.

Not only is the technique of blood transfusion much more difficult than that of the normal salt solution, but it was found that the transfused blood elements did not retain their vitality, but simply circulated in the blood stream as foreign matter. Thus what was supposed to be a great advaznttage was in reality a source of danger.

The difficulty of finding a healthy individual, free from constitutional taint and willing to donate or even to sell the quantity of blood required for transfusion, is another serious objection to that method.

The simple normal salt solution possesses not only all the advantages and none of the disadvantages or dangers of blood transfusion, but it also has the additional advantage of being obtainable in unlimited quantity and administration at any desired temperature. It is the remedy par excellence for the acute anemia following hemorrhages, whether they be traumatic, operative, post operative, post partum or post abortum. Even after pulmonary hemorrhage or the hemorrhage of typhoid fever, if employed with caution it will be of great value.

The normal salt solution, so called because the amount of inorganic salts which it contains is practically the same as that of the normal body fluids, has come to be a therapeutic agent of recognized value. Probably there is no other substance in the whole wide range of therapeutics that will successfully serve in a greater variety of conditions than the normal salt solution.

It is said to be as specific in its field of usefulness as any drug we possess. Being isotonic with the blood serum, it has no irritating effect upon the tissues. It is non-toxic. Does not coagulate albuminous fluids. It does not coagulate the blood. Injected into the blood stream, it does not cause the blood elements to undergo any change of form,

---

*Presented to the Medical Society of the State of North Carolina at the meeting at Hot Springs, June 2-5, 1903.

as would be the case if water only were used. Neither is the normal proportion of leucocytes altered.

J. G. Clark says, in the *Journal of American Obstetrics*, that there is no fear of untoward symptoms from the injection of one or even two liters of the solution at a time. The amount to be used, however, and also the rapidity of injection should, I think, be gauged by the patient's condition as any other therapeutic agent.

Bryant states that for transfusion the normal salt solution is far superior to blood, and that it has almost entirely superceded the use of blood for this purpose.

But the field of usefulness of the normal salt solution is not limited to making up the lost volume of circulating fluid after hemorrhage. The injection of the normal salt solution, whether intravenous, subcutaneous or rectal, raises arterial pressure and hydrates the tissues, causing rapid diuresis and increased elimination. It dilutes the toxins which may be pure in the blood and thus prevents in large measure their irritating and depressing effects on the vital centers. It stimulates the cardiac ganglia, increasing the force and regularity of the pulse. If the pulse be rapid from lowered blood pressure or weakness, it becomes slower and steady after using the salt solution.

On the kidneys the effect is very marked. The renal function is stimulated to greater activity and the amount of urea as well as the quantity of urine excreted is much increased.

Following the injection of normal salt solution, the number of hemotoblasts are increased. (Henieck.)

On inflamed or irritated mucous surfaces, irrigation with the normal salt solution has a decidedly soothing and anti-phlogistic influence.

The nervous system is markedly influenced by the injection of the solution. It has a decided sedative action. This is especially noticeable in the restless, excited condition following profuse hemorrhage and in the delirium of infestion states.

Glandular activity is stumlated and the tongue, which was dry and parched, becomes moist and thirst is allayed. The secretory glands of the skin are also stimulated and active diaphoresis results.

Hence, in conditions where we desire to dilute the toxins circulating in the blood; when we want rapid diuresis without causing renal irritation; in diarrhœal affections attended with depression due to absorptions of toxins, before operation on anemic patients; in shock and collapse; in the surgical and puerpural infections; in eclampsia; in diphtheria, pneumonia, urethitis, cystitis and various other pathological conditions, the use of the normal salt solution serves admirably.

In view of these facts, it is somewhat strange that the use of the normal salt solution is so limited among general practitioners.

No doubt the idea that complicated apparatus and very exact amounts of many different ingredients are essential has deterred many from taking advantage of this very useful therapeutic agent.

When the salt solution was first introduced as a substitute for transfusion, an effort was made to have the inorganic ingredients correspond closely with those of blood serum, hence the compound character of the normal salt solution as described in some text books. But experience has taught that

the simple solution of sodium chloride in sterile filtered water of a strength of 0.6 of one per cent., or about a heaping teaspoonful of common salt to a quart of water, is equally efficacious to the more complex solutions.

The sodium chloride may be found in every household. The water used should be boiled and filtered. Absorbant cotton makes a fairly good filter.

To cool to required temperature, the vessel containing the hot water may be placed in a larger vessel containing cold water, or it may be packed in ice.

As for apparatus, a number of instruments have been devised which are convenient and useful, but for all practical purposes the ordinary fountain syringe, or douche bag, which now-a-days is a part of every well-equipped armamentarium, will serve equally well.

For introducing the solution, the three routes most highly recommended are the rectal, subcutaneous and intravenous. The intra-arterial route has been employed, but is condemned on account of the danger of gangrene and arterial dilitation. To use the solution by the mouth is not practical, because of the nausea it would produce and also because in many critical states the gastric absorption is in abeyance. Of late years the procedure of filling the peritoneal cavity after celiotomy is coming into favor. It is said to obviate to a great extent the danger of post-operative shock, and to prevent the formation of adhesions. It also lessens the thirst and pain following operation and the tendency to suppression of urine.

The German surgeons have recently introduced the salt soda solution extensively in their clinics—0.2 per cent. of soda carbonate is added to the regular normal salt solution and used in irrigating the wound. It is said to have a remarkable attraction for leucoytes, thus promoting the physiological process of repair, while it is free from the slightest irritating action on the tissues.

The rectal route is employed when the condition of the patient is not critical, and the necessity for rapid introduction is not urgent. It may be used in urgent cases while the solution for subcutaneous or intravenous injection is being prepared.

The rectum and colon are capable of absorbing enormous quantities of the normal salt solution. The therapeutic effects are precisely the same as in the subcutaneous injection.

The advantages of this method are:

1. It can be administered by a nurse or other attendant.
2. The solution need not be sterilized.
3. It is painless.
4. There is no danger of infection.
5. The technique is simple.
6. There is an extensive surface for absorption.

In order to secure the best results with this method, it is desirable to use a tube long enough to pass the sigmoid flexure and command the absorptive power of the descending, transverse and ascending colon.

But lacking the long tube, an ordinary rectal enema tube may be used. Before introducing the solution, the patient should be given a cleasing enema. After this is passed the foot of the bed should be raised to obtain the benefit of gravitation. The temperature of the solution should be about 100 degrees F., for at this temperature the absorption will be most rapid. If the stimulating effect of heart is required a higher temperature may be employed.

Ordinarily after a thorough cleansing enema the bowels will readily tol-

erate the presence of the normal salt solution, for it does not irritate.

From one to four pints may be used. Owing to the large extent of absorbing surface, considerable quantity of the solution soon gets into the general circulation.

The technique of the subcutaneous method as described by Byrne in Merck's Archives is simple, safe and practical. When the solution has been prepared and properly sterilized and the site of injection thoroughly disinfected, the physician with aseptic hands holds the needle and allows the flow to start before introducing it in order to remove the air and cold fluid from the tube. With the other hand a fold of skin in the axillary of retromammary region, or other region where the cellular tissue is loose and easily distensible, should be grasped between the thumb and finger and elevated similar to the method employed in ordinary hypodermic injections. The needle is introduced while the fluid is flowing and is pushed into the subcutaneous tissue, getting well beneath the skin, but not penetrating the muscular tissue. The douche bag is usually suspended five or six feet above the patient. Gentle massage over the injected fluid will facilitate absorption, and the needle may be partly withdrawn and pushed in another direction.

Heineck says that 700 c.c. may be safely injected through one puncture.

The temperature of the solution should be from 105 to 110 degrees F.

The intravenous method is fully described in all late text books on surgery and I need not take time for any description here. The fact that its results are rapid and that by it heat is brought directly to the cardiac and arterial ganglia is what recommends the intravenous method to many clinicians. Some objections to the method, however, may be noted. When a patient has lost much blood or in cases of shock the veins are difficult of access.

In children and obese individuals the veins are not easily found.

There is some danger of producing acute pulmonary edema.

Cases of embolism and phlebitis following intravenous injections have been reported.

The procedure is more or less painful and requires rigid asepsis.

Rapid intravenous injections may cause cardiac paralysis by over distension.

Hence in all cases where there is cardiac lesion or myocardiac weakness, the subcutaneous route should be selected in preference to the intravenous. Atheroma and apoplexy are also contraindications for the employment of the intravenous method.

Some advantages of the subcutaneous method over the intravenous may be mentioned as follows:

1. The technique is much simpler and fewer instruments are required. A douche bag with six or eight feet of rubber tubing and a hollow aspirating needle are all that is needed.

2. No anesthetic, no incisions, no stitching of wounds is required.

3. No danger of introducing air.

4. The fluid being taken more gradually into the circulation, danger from sudden increase of blood pressure is avoided.

The subcutaneous injections may be given by any well trained nurse.

I have already mentioned in a brief way some of the indications for the use of the normal salt solution. Would say further relative to its use in shock, that probably there is no other therapeutic agent that will give such quick and sat-

isfactory results. This condition being due chiefly to the accumulation of blood in the large abdominal vessels, depleting the brain and other vital centers and causing the heart to falter from lack of proper stimuli, is overcome by the introduction of the normal salt solution into the circulation by either the subcutaneous or intravenous route. The increased volume of circulating fluid acts as a direct stimulus to the heart and arteries. In this way the blood which was more or less stagnant is put into active circulation. Blood pressure in the peripheral arteries rises, due to the increased force of the heart beat, which has been influenced by the injected fluid. As arterial tension increases the heart receives a better supply of nourishment through the coronary arteries, and is thus enabled to maintain its normal function. The nerve centers—brain and spinal cord—receive increased supply of blood and soon regain their normal control over the vaso-motor system.

In uremic poisoning from one to three quarts of the normal salt solution injected into the bowel three times a day is highly recommended as one of the best measures to stimulate the kidney function.

According to Volt, this procedure will not only increase the quantity of urine passed, but may considerably augment the amount of urea excreted.

From what we know about elampsia, it appears that one of the most important indications is for increased elimination. The normal salt solution offers one of the very best means for stimulating all the emunctories and at the same time so attenuating the poisons present as to greatly lessen their influence on the nervous system.

In surgical and puerpural infections the use of the normal salt solution is strongly indicated.

In acute diarrhœal affections, such as cholera, enteritis and dysentery, where enormous quantities of fluids are being separated from the body, lowering the blood pressure and weakening the patient, it is clear that a method of treatment which will restore the normal amount of fluids to the circulating apparatus and to the tissues will be the rational one to employ.

B. J. Richardson says that "emptiness of the circulatory cavities is the cause of collapse in cholera."

In these affections the injections of the hot nomal salt solution into the bowel after cleansing enemata are found to be of great value.

In urethritis, cystitis and vagititis irrigations with the normal salt solution will be attended with excellent results.

To quench thirst in those conditions where food and drink cannot conveniently be given by the mouth, such as after laryngeal intubation, injections of the salt solution may be employed to good advantage.

Some Experiences in Obstetrics—Twenty Cases of Puerperal Eclampsia; The Induction of Premature Labor; Retained Placentae.*

By Dr. L. B. McBrayer, Asheville, N. C., ex-President Buncombe County Medical Society; ex-Coroner Buncombe County; Member Mississippi Valley Medical, American Medical, North Carolina State Medical Societies; Visiting Physician and Surgeon Mission Hospital, Asheville, etc., etc.

I have treated twenty cases of puerperal eclampsia, including those seen in consultation. Of these twenty cases, eighteen were primipara, one was a 3-

*Presented to the Medical Society of the State of North Carolina at the meeting at Hot Springs, June 2-5, 1903.

para, and one was a 6-para. The convulsions ranged in number from one to forty. The case having forty convulsions was fifteen miles in the country, and had been having convulsions eighteen hours when I was summoned to her bedside, child stillborn. Another case was in McDowell county, and the patient had been having convulsions 12 hours when I reached her, child still born. One set of twins, remainder single birth. In the case of twins, patient had four convulsions; first child was delivered with forceps, in a healthy condition, and is a healthy ten-year-old boy today. The second child was a breech presentation, and was delivered by traction on feet, following the first in fifteen minutes, but was dead. All the other eighteen children were born in good condition, and so far as I know are alive and healthy today. When called to a case of eclampsia, my rule has been to give one-half grain of morphia hypodermically, administer chloroform, and terminate labor artificially at the earliest possible moment. In every case save one the convulsions have continued until the uterus was emptied; that case had only one convulsion. Administered morphia, one-half grain, consciousness returned, gave large doses of salines, sent patient to Mission Hospital where she was delivered a few days later per via naturalis, without any untoward symptoms. In all cases, save two, the convulsions began after pains were established, and nature was usually kind enough to dilate the os, which greatly facilitated matters. One of these cases was one mentioned above, and the other was the case in McDowell county. This latter case had no pains, and was thoroughly comatose between convulsions. I dilated os with my fingers as large as I could, until it would admit small goose egg, and applied forceps with the head engaged in the superior straight. This I found quite troublesome, because when I introduced first blade, which was easily done, it pulled cervex so far to that side that I found it most impossible to get the other blade inside the os, and did not succeed until I caught the cervex with a uterine dressing forceps and pulled it down, and had an assistant hold it while I introduced blade of forceps, which was then easily done. It required about twenty minutes to finish dilation of cervex, and ten minutes more to complete delivery.

In none of my cases did convulsions continue after uterus was emptied. There was albuminuria in every case save one, a negress; and specimen of urine could not be obtained until the fifth day after confinement. But albuminuria must have been present as patient had albuminuric retinitis sufficient to cause total blindness for four days, which cleared up completely by the end of a month. This is the only case of material interference with vision noted. But in every case the albumin disappeared in from six to thirty days, usually in about a week. One case, 6-para, was followed by puerperal mania, which lasted two months, with complete recovery at the end of that period; patient has had normal labor and puerperium since; all the other cases had a normal puerperium. The after treatment has consisted of salines, cathartics, diaphoretics and diuretics, consisting mostly of calomel, hot baths, and Basham's mixture, and a diet restricted to buttermilk.

I think I have warded off convulsions in three cases by giving the treatment mentioned above, for several weeks prior to date of confinement, and giving

chloral hydrate and bromide of potassium freely during and just before labor. One of these cases came so near having a convulsion that everything grew very dark, as she expressed it, during the last pain. And in three cases I have failed to keep off convulsions by this treatment. The other seventeen cases were seen for the first time during labor. The per cent. of recoveries in mothers has been one hundred. The per cent. of living children delivered has been 85, and the percentage of stillborn children has been 15. Not counting the two cases that had been having convulsions, 12 and 18 hours respectively, I delivered 18 living children in 18 cases and one dead child.

Production of Premature Delivery.— It has been my misfortune to feel it my duty to terminate labor before full term in three cases:

No. 1 was a 9-para, was comatose at six months with chronic Bright's disease, which at the time I could not differentiate from the coma of eclampsia; delivery was entirely artificial, and was completed in three hours. Patient recovered slowly from coma, and died at the end of 12 months from her chronic nephritis. The vision was entirely destroyed in this case by albumenuric retinitis and hemorrhage into the choroid. There was also blood in the urine, both by macroscopical and microscopical examination. About one month after delivery no blood could be found in urine, but sight was never restored.

No. 2 was a 4-para, and had persistent vomiting of pregnancy; tried everything that could be thought of, heard of, or read about, in the way of medicine, from cerium oxilate to essence of pepsin, and all kinds of food, from fried cabbage to liquid peptonoids, until the stomach absolutely refused to retain anything, not even crushed ice in champaigne, for one moment. I then began on the other end, and gave all food and drink and a little medicine by the rectum until that organ also refused to obey my commands or entreaties, at the end of which time, which was about four and one-half months, my patient was so near the pearly gates that she could see within the portals, and she was perfectly willing to enter, and just as willing to go to the other place, or anywhere else, to get rid of that terrible nausea. Pulse 130, temperature 101½. At this stage I terminated the pregnancy, and found a uterine mole. I introduced uterine sound into uterus to bring on labor; pains came on in fourteen hours; nausea stopped immediately after I entered the uterus; patient took some nourishment before uterus had emptied itself, and she had an uninterrupted recovery; has given birth to two children since, with normal labor and puerperium. The eloquent clergy may be fond of giving their supporters glimpses into the city of the New Jerusalem, but as for me, I shall never allow another patient of mine to go so near the brink with pernicious vomiting of pregnancy.

No. 3, primipara, aged 20. Was seen at request of Dr. W. L. Dunn, of Asheville, N. C., who was treating her for tuberculosis; husband also tubercular; had had more or less treatment for nausea; five months and one week advanced; had had distressing nausea since beginning of second month. Stomach finally refused everything, and rectum was never very much better. For the last ten days while we were testing the efficacy of rectal alimentation, patient vomited mucous and bile every day, although nothing was swallowed unless it was saliva. Patient already thin and

anaemic from her tubercular process, lost fifteen pounds more during this trying ordeal, which brought her down to 90 pounds; temperature normal, pulse 100. Dr. Dunn reported that the tubucular process was at a standstill, and of course she was receiving no treatment for that trouble. Brought on labor by rupturing membranes with uterine sound, and introducing catheter into uterus and keeping it there by vaginal tampon. Of course, all known precautions as to asepsis were taken. At the end of twenty-four hours patient had a chill, and temperature went up to 102; removed catheter and gave vaginal douche of sterile water, temperature fell to normal in twenty-four hours, and at the end of seventy-two hours from time of invasion of uterus, pains came on, and eight hours later delivery was complete. This was June 8, 1902. Patient at this time seems to be in good condition. It is my opinion that tubercular married women should be warned not to allow themselves to become pregnant, and instructed if necessary, how to prevent it. Further, should a tubercular woman become pregnant, I believe, in justice to both mother and offspring, the pregnancy should be terminated as soon as it is diagnosed.

Transverse Implanation of Placentae.—That we do have adherent placenta is true; that it is very rare, only a few times in 1,000 cases is also true, and the accoucheer should never introduce hand into uterus to remove placenta except when it is adherent. That we often have retained placentae is also true, and this often, or nearly always due to what I term transverse implanation of placenta; or even if it is a little oblique, it is sometimes impossible for the uterus to expel it. I have seen one case of this kind in a negress where placenta had been retained for six hours, although she had had hard after-pains every few minutes, as she termed it. And another case that had been retained for eight hours, with firm uterine contractions. In these cases I do not practice Crede's method, but sit by side of patient, place hand on abdomen on fundus uteri, depressing the ulnar surface of the hand as far behind the uterus as possible, hook the fingers around the opposite cornua of uterus, pressing the heel or plam of hand downward, thus tilting the transverse placenta on its end, when it is always delivered prompt. I have not had my hand in a uterus after a full term delivery to deliver a placenta in seven years.

Questions of the Board of Medical Examiners of the State of North Carolina, Forty-First Annual Session, Hot Springs, N. C., May 27 to June 1, 1903.

ANATOMY.—*James M. Parrott, M. D., Winston.*

1. Describe the body of the inferior maxillary bone.

2. Describe the shoulder joint.

3. Give the origin, insertion and nerve supply of the following muscles:

(a) Pronator radii teres.

(b) Supinator longus,

(c) Psoas Magnus,

(d) Tibialis posticus,

(e) Quadratus lumborum.

4. Describe the left ventricle of the heart, and give its relative position as to the chest wall.

5. Give the relations of the external carotid artery, and name its anterior branches.

6. Give the relations of the femoral artery, and name its branches.

7. Describe the Fissure of Rolando.

8. Mention the superficial and deep origins of the 7th (facial) pair of cra-

nial nerves, its foramen of exit, and give its distribution.

9. Give the boundaries of the popliteal space, and mention its contents.

10. Name the branches of the Sacral Plexus, and describe the great sciatic nerve giving its minute relations.

PHYSIOLOGY.—*M. H. Fletcher, M. D., Asheville.*

1. Give total quantity of blood in the body (a) How is blood regenerated after hemorrhage? (b) What per cent. of loss of blood can be borne without fatal results? (Approximate). (c) What constituents in the blood are more slowly regenerated after hemorrhage?

2. Give nerves controlling movements of the heart. (a) Give origin, course and distribution of the inhibitory nerves.

3. Give location and anatomical relations of the pancreas. (a) Its duct. (b) Type of gland (c) Function in digestion. (d) Name enzymes contained in the pancratic secretion.

4. Name the ductless glands. (a) What is meant by term "Internal Secretion?" (b) Give symptoms following removal of the adrenal bodies.

5. What are carbohydrates? (a) Their nutritive value? (b) What forms of energy do they supply to the body?

6. What muscles are concerned in respiration? (a) What changes take place in venous blood in its passages through the lungs? (b) After blood is arterialized where does it go? (c) What is alveolar capacity?

7. Describe a nerve cell. (a) What structure in the cell body conveys nerve impulse? (b) What elements do sympathetic ganglia contain? (c) Give difference in function between anterior and posterior spinal nerve roots.

8. Give origin and function of third cranial nerve. (a) When it is paralyzed or divided what effects ensue?

9. Describe eustachian tube. (a) Give its function. (b) Give principal seats of sense of taste. (c) What nerve supplies it?

10. How much air space should each person be allowed when confined in a room? (a) How often should the air be renewed?

CHEMISTRY.—*Geo. W. Pressly, M. D., Charlotte.*

1. Give three distinguishing characteristics of chemical force.

2. Distinguish between an atom and molecule.

3. Define an element and a compound.

4. Name three non-metallic elements and give the symbol and atomic weight of each.

5. Convert 39 degrees Centrigrade to Farenheit. Give rule.

6. What is meant by specific gravity?

7. What is distillation and sublimation?

8. What are alcohols and what is the formula for absolute or real alcohol?

9. Give antidotes for arsenic poisoning.

10. Give composition of normal urine.

PRACTICE OF MEDICINE.—*A. A. Kent, M. D., Lenoir.*

1. Give differential diagnosis between diphtheria and tonsilitis.

2. Give differential diagnosis between variola, varicella and impetigo contagiosa.

3. What is the essential cause of enteric fever?

4. How would you treat interstinal hæmorrhage in enteric fever?

5. What is the essential cause of malarial fevers?

6. How would you treat a case of

lobar pneumonia on the first day of the attack?—in the seventh day?

7. What is acute gastritis? Give symptoms and write a prescription for it.

8. Define uræmia, giving symptoms and what percentage of urea is normal and what pathological in the blood. Write a prescription for it.

9. Define acute anterior polimyelitis, giving location of the seat of the disease.

10. Give a reliable test for glycosuria, and state what percentage of sugar is normal in the blood, and what pathological.

SURGERY.—*Frank H. Russell, M. D., Wilmington.*

1. Name the varieties of ulcers.

2. Give cause, symptoms and treatment of acute wound infection.

3. Give in detail the method of giving an intravenous saline infusion. (a) In what surgical conditions indicated.

4. Give symptoms and treatment of dislocation of shoulder joint (ant.) complicated with fracture of surgical neck of humerus.

5. Describe Potts fracture.

6. Give symptoms of tubercular disease of hip joint.

7. How would you treat an appendicular abscess?

8. Give symptoms of strangulated hernia.

9. Give symptoms of vesical calculus.

10. Define hysterorrhaphy, nephrotomy, colostomy,—cholecystotomy.

OBSTETRICS.—*Chas. O'H. Laughinghouse, M. D., Greenville.*

1. Inevitable abortion—treatment.

2. Puerperal eclampsia—preventive treatment.

3. Postpartum hemorrhage — treatment.

GYNECOLOGY.

1. Define trachelorrhaphy.

2. Define urethral caruncle. Give treatment.

3. Define dysmenorrhea.

DISEASES OF CHILDREN.

1. Ophthalmia neonatorum. Treatment.

2. Diphtheria. Treatment.

3. Entero-colitis. Treatment.

MATERIA MEDICA AND THERAPEUTICS—*J. T. J. Battle, M. D., Greensboro.*

1. Mention three of the most used preparations of Opium and two Alkaloids, dose of each, its effect on the system, symptoms of toxic dose, and antidotes.

2. Give three preparations of Belladonna and its principle alkaloid, dose of each and its physiological action.

3. What precautions should be taken before administering the anaesthetics? (a) Chloroform? (b) Ether?

4. What is "normal saline solution," its strength, indication for its use, and mode of employment?

5. What three preparations of Digitalis are more often used? Its Physiological effect? What condition of the heart contraindicates its use?

6. Dose of Salol? How disposed of in the intestines? How eliminated? Symptoms of overdose?

7. Dose of F. E. Ergot, its therapeutic uses? Explain its action.

8. Dose of Carbolic Acid, chemical and physiological antidotes?

9. Why should Tr. Ferri not be prescribed with vegetable tinctures? What dangers might arise from Strichnia and Bromides in combination? Give technical names for common salt, calomel and sugar of milk. Why not prescribe them in combination?

10. Give the two preparations of

Cimicifuga, doses, common name and its uses.

The legislative enactment which relieved osteopaths applying for license from the necessity of examination on branches not taught in their schools, viz., surgery, obstetrics, etc., required their being examined on Physical Diagnosis and Toxicology. The following are these examinations:

TOXICOLOGY.—*J. T. J. Battle, M. D., Greensboro.*

1. What poison develops, at times, in ice cream?

2. Symptoms of chrome mercureal poisoning; manner of causing its diminuition?

3. Symptoms of lead poisoning; prophylactic preventions; means of counteracting the poisonous effect?

4. Explain Iodism; how is it caused; how cured.

5. Tell how the discoloration of the skin caused by silver can be removed.

6. Tell how should cocaine poisoning, acute and chronic, be treated.

7. What treatment should be used in carbolic acid poisoning?

PHYSICAL DIAGNOSIS.—*A. A. Kent, M. D., Lenoir.*

1. Define physical diagnosis and name the several means and mechanical aids used in making a physical diagnosis.

2. Give physical diagnosis between diphtheria, paratitis and tonsilitis.

3. Give diagnosis between variola, varicella and impetigo contagiosa.

4. Give physical signs of disease of the mitral valves of the heart.

5. Give physical signs of pleuritis with effusion.

6. Give symptoms and initial lesion of progressive muscular atrophy.

7. Define acute anterior poliomyelitis, giving symptoms and location of seat of the disease.

Report of the Board of Medical Examiners to the Medical Society of the State of North Carolina, Hot Springs, N. C., June 3, 1903.

Mr. President and Gentlemen of the Society:

Your Board of Examiners would respectfully submit the following report:

The number of applicants for license, 107. Of these, two withdrew and one was not considered on account of irregularity in examining room. Of those submitting to the examination, 78 were granted license, as follows:

John S. Fowlkes, Rockingham; Thos. H. Strohelker, Davidson; Robt. E. Mason, Charlotte; Wm. DeB. MacNider, Raleigh; Hy. C. Cowles, Jr., Statesville; Martin L. Matthews, East Bend; Wm. A. Robinson, Brink, Va.; Lewellyn J. Coppedge, Rockingham; Oscar C. Daniels, Oriental; Daniel A. Dees, Grantsboro; Neilson P. Coppedge, Rockingham; Thos. C. Johnson, Tomahawk; Walter E. Walker, Richmond, Va.; Joseph L. DeCorniss, Shawboro; Claude B. Williams, Elizabeth City; Chas. H. Hoover, Crinsic; Robt. W. Petrie, Reepsville; J. Frank Jonas, Thermal City; Joseph P. Aydlotte, Earl;; Chas P. Edwards, Bald Creek; Marvin L. Smoot, Salisbury; Francis J. Clemenger, Asheville; Alfred F. Hammond, Trenton; Jas. L. Lilly, Mt. Gilead; Sol. E. Greenwood, Mascot; Dallas W. Chestnutt, Wilmington; Jas. M. Pethel, Charlotte; Harry M. Montgomery, Burlington; Archibald A. McFayden, Raeford; Pompey L. Hawkins, Kittrell; John William Carroll, West Raleigh; Walter W. Sawyer, Elizabeth City; J. Gerald Murphy, Atkinson; Wesley C. Slate, Quaker; Lyttle C. Ad-

ams, Jonesville; David S. George, Buck Shoals; Clarence L. Wilson, Newton; Asa C. Whitaker, Devan; Thos. J. Proffitt, Sugar Grove; Willis Alston, Jr., Littleton; Wm. M. Jones, Jr., Asheville; Price B. Hall, Belmont; Floyd Johnson, Benson; William F. Robinson, Mars Hill; Daniel R. Sayers, Jr., Hamlet; R. M. Caveness, Greensboro; Willis D. Gilmore, Raleigh; Alfred H. Caveness, Coleridge; S. D. McPherson, Liberty; W. Clinton Linville, Kernersville; Ector G. Patterson, Liberty; Thos. E. W. Brown, Asheville; Chas. L. Long, Pine Bluff; John Reynolds, Asheville; Chas. St. V. Zimmerman, Asheville; Sam. A. Wilkins, Dallas; Guy E. Dixon, Belwood; R. M. King, Philadelphia, Pa.; Edward J. Wood, Wilmington; Joseph H. Boyles, Greensboro; Guy F. Thigpen, Mildred; Napoleon B. Moriner, Jamesville; Wm. B. Murphy, Tomahawk; Julius A. Childs, Hickory; James H. Reynolds, Asheville; James B. Outlaw, Goldsboro; Thos. R. Little, Greensboro; Julius A. Doster, Southport; John W. Was, Asheville; James T. Nichols, Barnard; R. A. Campbell, Pine Bluff; Walter B. Pollard, Hamilton; Chas. F. Norton, Asheville; Thos. A. Mann, Baltimore, Md.; James W. Flow, Glass; Thos. H. Valentine, Voltore.

The first honor was won by Dr. Thos. R. Little, of Greensboro, who made a general average of 96 1-7; second honor by Dr. James L. Lilly, Mt. Gilead, whose average was 96, and the third honor by Dr. M. L. Smoot, Salisbury, who made 95 2-7.

The CAROLINA MEDICAL JOURNAL extends its congratulations to the successful applicants for license, and welcomes them into the ranks of the medical profession and wishes them abundant success.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

Meeting Held March 2, 1903.

Recurrent Sarcoma Cured by X-Rays.—Dr. F. M. Jeffries presented a canary bird with an interesting history of recurrent sarcoma cured by X-rays. The bird was brought to him about seven months ago suffering from a small tumor in front of the right eye, and he was asked to make a diagnosis. The growth was removed under anasthesia and sections made in the usual way. The tumor was found to be a splindle-celled sarcoma of the small celled type. The removal of the growth opened the nares and a large part of the nasal cavity. Seven mouths later it was noticed that recurrence was beginning and the growth rapidly increased, involving more territory. The bird was first exposed to the rays for a very short time, one, two or three minutes, which was gradually increased to five, and finally to ten minutes at each treatment. A medium tube without a shield was used. The growth quickly diminished in size, and the inflammation about it subsided. The treatment lasted five months, when

it ceased, and up to the present time there have been no signs of recurrence. Considerable cicatricial tissue is now apparent at the site of the neoplasm. The bird has a cataract of the right eye, and it is not known whether this existed previous to the beginning of the X-ray treatment. The theory is that its formation is independent of the X-rays.

Dr. J. A. Robertson said that he had employed the X-rays for the past five or six years, and, during the past few months, had had an extended experience in the treatment of epithelioma and carcinoma. He emphasized the fact that if tubes of sufficient penetrating strength are used, a cure will usually result. This fact had been demonstrated in the case of the bird, in which medium strength was used, without a shield. Well-known authorities claim that neither sarcoma nor carcinoma should be treated with a shield. As to the cataract, the speaker thought it was probably the result of X-ray treatment, as, when he used the fluerscope, conjunctivitis developed in both eyes, and cataract might reasonably be supposed to result from this source of irritation, if sufficiently long continued.

Dr. W. H. Luckett said that he thought it rather soon to state positively that the growth had been "cured." He had seen many instances of so-called X-ray cures of sarcoma, carcinoma, etc., but the growths usually recurred. One such case was that of a woman who suffered from a sarcoma of the scalp about the size of a goose-egg. She was treated with X-rays for about three months, and the growth was reduced to about one-fourth its original size, and a month or so later it entirely disappeared. He did not see the patient for two months, when she presented herself at the dispensary with the tumor as large as it was when first seen, and it was suppurating. Cochexia soon followed and death supervened. In his opinion it is wrong to work without a shield. Dermatitis often results from the use of the X-ray, and the radiographist must stop work for months at a time and not even go near the machine. The speaker also mentioned a case of epithelioma of the cavity of the mouth. The diagnosis was made from a section and a Ferguson speculum was introduced into the mouth, and the patient was treated in that manner for four months by the radiographist to the hospital, but despite the fact that he received very careful attention, the patient is dead.

Dr. Jeffries closed the discussion by saying that in regard to the selective power of the X-ray, the present case was an instance in which the entire body was exposed, as it was impossible to concentrate the rays, and, except one instance in which the bird's feathers were burned from over-expsure, there were no ill effects.

PUERPERAL SEPTICEMIA.

Dr. J. H. Burtenshaw presented a report of a case of general puerperal septicemia treated by intra-abdominal irrigation with normal saline solution; recovery.

The patient was a French woman, twenty-four years of age, who became pregnant in August, 1902. On December 9th she produced abortion by inserting an ordinary penholder into the cavity of the womb. The endometrium was badly wounded by the instrument and considerable hemorrhage followed the introduction of the instrument. He was called to see her at midnight, December 16th. Her temperature was 104.4 F., her pulse rate 120, and her respiration rapid and shallow. Peri-

tonitis had developed. She had urinated but once during the previous twenty-four hours. Urinary analysis showed a specific gravity of 1031 and the presence of much albumin. Blood examination revealed innumerable streptococci and uterine scrapings developed streptococci and staphylococci.

The uterus was gently curetted and a suppository containing one dram of iodoform, fifteen grains of starch, and glycerine, was inserted into the cavity. Enteroclysis was attempted, but was not persisted in as it caused the patient such marked pain. Eight ounces of blood was extracted from the median bacilic vein, and eleven ounces of normal saline solution introduced. Improvement was pronounced.

The following morning her temperature and pulse-rate were as before and coma was developing. Subcutaneous infusion was practised, but absorption was very slow. It then occurred to the speaker that thorough irrigation of the entire abdominal cavity with normal saline solution might accomplish three things: first, remove the collection of serum which undoubtedly already was affected by streptococci; second, through absorption of the most extensive lymphatic system of the body, the kidneys would be more quickly and radically influenced; and third, peritonitis adhesions would be prevented. Several gallons of a normal saline solution, prepared according to the formula of Locke, containing sodium chloride, 115; calcium chloride gr. $3\frac{3}{4}$; and potassium chloride, gr. iss to the quart, was made ready and kept at a temperature approximating 110. F. A four quart fountain syringe and tube were sterilized by boiling. A two-inch median incision was then made in the abdomen midway between the umbilicus and pubes, and the tube of the syringe introduced as far as possible into the pelvis. For one hour the solution was allowed to flow into the cavity without intermission. The patient was frequently turned on her side and pressure made on her flanks to facilitate the exit of the fluid. At the end of the hour her temperature had dropped to 102.6 F., and her pulse-rate to 110. Forty ounces of urine had been drawn from the bladder, the last being of a specific gravity of 1013.

At ten o'clock at night the irrigation was repeated for half an hour. The following day, from ten o'clock until midnight, the irrigation was continued at three hour intervals. The abdominal incision was closed on December 19th. Her temperature then was 100.4 F., and her pulse-rate 100. From ten o'clock on the night of the 17th to noon of the 19th, 210 ounces of urine was collected by catheter. Recovery was uneventful. On February 1st the speaker examined her at his office and found the uterus to be in good condition and freely movable, but enlarged and somewhat sensitive. Both ovarian regions were sensitive, and the left ovary was enlarged. He could discover no evidence of pus foci in the broad ligaments or elsewhere. There appeared to be an entire absence of peritoneal adhesions.

Dr. Luckett opened the discussion which followed the reading of Dr. Burtenshaw's paper. He said he thought the treatment adopted might be successful in a small proportion of cases. It had been tried and had failed. He knew of cases in which two incisions had been made in the abdomen through which the cavity had been irrigated, with very unsatisfactory results, the cases resulting fatally.

Dr. Burtenshaw said that he had not

reported the case with any idea that the method would be adopted as a routine practice in puerperal infection. As far as he knew, it is the first case to be put on record in which the patient had recovered from such profound strepticoccic infection by the employment of such a method of treatment. He was familiar with one or two detailed cases referred to by the previous speaker, but his own case possessed distinctive features. The kidneys had ceased to functionate and death would probably have resulted in a few hours had the urinary flow not been re-established as it was. The character of the solution and the length of time which it was allowed to flow into the abdominal cavity were factors which also differentiated the case from those referred to by Dr. Luckett. The entire absence of peritoneal adhesions and of the other ordinary sequels of septic peritonitis could only be attributed to the treatment adopted.

NEWER MATERIA MEDICA.

Lacto-Samatose in Pediatric Practice. —(By Prof. C. Cattaneo, Parma, Italy.) —A food preparation containing the nutritive material of milk in an easily digestible and concentrated form and free from fats, must be most welcome to the pediatrician in cases of severe dyspepsia. I therefore subjected lacto-somatose, which consists of the albumoses of milk in chemical combination with a small percentage of tannic acid, to a test in my division of the Children's Hospital, at Parma, and have learned to value this preparation very highly in two directions, namely: its excellent influence in causing an increase in weight of the child and its effect upon the consistence of the stools.

In reference to the increase of weight the following data are appended:

Case I. Infant, 6½ months old, breast fed; marasmus in consequence of chronic digestive disturbances. Weight, 3 kilos, 300 gm. After the use of lacto-somatose increase at the end of first week was 200.0 gm., second, 500.0 gm., third, 300.0 gm., that is to say an increase of one kilo in three weeks, notwithstanding the fact that during this time the milk of the nurse was waning.

Case II. Infant, three months old, artificially nourished, chronic dyspepsia; weight, 4 kilos. At the end of 20 days, during which 50.0 gm. of lacto-somatose had been used the increase of weight was 300.0 gm.

Case III. Infant, 11 months old, nourished at breast and upon porridge; dyspepsia, anemia, and marasmus. Weight, 5 kilos, 500.0 gm. After 20 days' administration of lacto-somatose increase of weight 800.0 gm.

Case IV. A child of 21 months, marasmus, dyspepsia, chronic bronchial catarrh. Weight 7,500 gm. Under the use of lacto-somatose increase of weight after 14 days 1,000 gm.; after another 14 days, 500.0 gm., that is, after four weeks' treatment, an increase of 1½ kilos.

Case V. Child, 23 months old; delicate, otherwise perfectly healthy. The patient suffered from enteritis during the first months, which completely disappeared after a nurse was engaged. Weight at present 8,720 gm. On addition of lacto-somatose to the ordinary

Dependable Doses

for Children.

Superior in effects to tablets.

The medicament is carefully triturated with sugar of milk and rolled into minute pills and designated

PARVULES

We note a few of the popular kinds:

Aloin, 1-10 gr.
Calomel and Ipecac, aa 1-10 gr.
Dover's Powder, ... 1-3 gr.
Nux Vomica, ... 1-50 gr.
Calomel, 1-10 gr. 1-20 gr. 1-8 gr. 1-6 gr.
Capsicum, ... 1-20 gr.
Morphin. Sul. ..... 1-50 gr.
Podophyllin, ... 1-40 gr.
Santonine, ... 1-10 gr.

and a list of others quite as valuable.

PARVULES are just as effective for adults; the plan of administration is a small dose, frequently repeated.

Samples and literature on request.

WILLIAM R. WARNER & CO.

Makers of
Standard Products for Physicians Prescribing,

PHILADELPHIA NEW YORK CHICAGO NEW ORLEANS

diet increase of weight 360.0 gm. in 14 days.

The latter case, in which the increase was thrice as great as the normal, may be regarded as a control experiment which invalidates any objection that the increase of weight was not due to the lacto-somatose, but to a progressive amelioration of the disease. Moreover, such rapid increase in weight would not be observed during convalescence.

As regards the effect of lacto-somatose upon the stools I also observed that within a few days, in consequence of the astringent action of the preparation, the evacuations became firmer, and in case V, in which some constipation existed, even hard. The stools always lost in a short time their green color and dyspeptic character, and became more uniform without lumps of undigested milk coagula and of a somewhat darker color.

Other signs of improvement of the general health, especially that of the condition of the digestive apparatus, showed the favorable influence of lacto-somatose. The preparation is odorless, tasteless, and can therefore be administered in milk, soups, cocoa, or water, without any repugnance on the part of the child, which is not a slight advantage. In general children receive two doses daily of 5 to 6 grams.

Biliousness.—(By J. A. Clement, M. D., Baltimore, Maryland.)—The world is full of biliousness. Now I am free to admit that the term "biliousness" is not the least bit scientific, but the laity know what it means and when they are given something to help it and that something does help it they want more of that something which fact increases the demand for that something which, in this case, is Felsin.

I report results in four cases. In each one of these cases I used Felsin and nothing else. I wished to test the value of the preparation, so that these cases show bona-fide results from the use of the tablets, and that is what physicians want.

Case No. 1. Mr. G., aet 40; occupation, patrolman. This patient is so situated that his meals are taken very irregularly and, as a rule, hurriedly. Natural result—dyspepsia. On January 18, 1903, called for prescription; complained of accumulation of much gas and rumbling in abdomen, pyrosis, bad taste in mouth, a sensation of "a rock in my stomach," bowels irregular and slight frontal headche. Gave Felsin Tablets, one after each meal and one at bed-time. February 1st, reported that he had received considerable relief. Continued the prescription. February 7th, reported all symptoms cleared up with the exception of the constipation, which was improving. Ordered Felsin, one tablet after meals, for an indefinite time.

Case No. 2. Mr. M., aet 53; no occupation. He belongs to what I term the "hot bird and cold bottle" class of dyspeptics. Imprudent both in eating and drinking. His main complaint was excessive flatulence, bilious headache and constipation. Gave Felsin Tablets every four hours for three days, then one tablet after each meal and one at bed-time. The flatulence disappeared in two days, the headache in three and the bowels are beginning to act as they should. If he will be careful with his diet and continue the use of the tablets for a couple of months I am confident he will get well, but such cases are hard to manage.

The tablets acted in this case very

North Carolina Medical College

DAVIDSON, N. C.

SITUATION—Heathful, moral, conducive of study.

STANDARD—Equal to any College of the South.

RECORD—Excellent as shown by the high standing of our graduates.

EQUIPMENT—Seven Laboratories, Three Hospitals, Two General Dispensaries.

CLINICAL INSTRUCTION---On the modern plan.

CHARLOTTE CLINIC---A superbundance of material.

FACULTY---Strengthened by ten of Charlotte's leading Physicians and Specialists.

INSTRUCTION---By "quiz method" and laboratory work.

PHENOMENAL GROWTH---From 11to 67 students in 10 years. From 4 to 17 Professors in 10 years.

For further information and Catalogue

Address

J. P. MUNROE, M. D.,

DAVIDSON, N. C.

nicely as, from the patient's description, he has about run through the list of digestives. Now he is grateful to Felsin.

Cace No. 3. Mrs. C., aet 65. For three months past has noticed that if she takes anything more for supper than a cup of tea and a cracker or two she would awaken next morning with headache and more or less nausea. Also reported chronic constipation. Ordered Felsin tablets after each meal and on going to bed. The first two mornings after using the tablets awakened with headache but no nausea; the third morning awakened free from both headache and nausea. Has now been using tablets two weeks and can eat a moderate meal at night with no bad results next day. Will continue use of tabets.

Cace No. 4. Mrs. D., aet 24. Four months advanced in first pregnancy, complains that "everything she eats fills her full of wind and she can't get rid of it." Complaints of pregnant ladies must be taken with a grain of salt, but prescribed Felsin, one tablet after meals. After eight days treatment she reported that she had no more difficulty with the wind, but now she can't get enough to eat. Evidently Felsin in this case relieved the gas and stimulated the appetite.

530 North Gilmor St., Baltimore, Md.

Editor's Note—Felsin is a new preparation manufactured by the Viskolein Co., 210 Fulton Street, New York, who will no doubt send samples to physicians upon request.

Chaparro Amargoso—A New and Important Dermatological Remedy.—A new dematological remedy of pronounced value is presented to the profession by the Matthewson Laboratory, of Marshall, Texas. It consists of the active principles of the Texas shrub, Chaparro Amargoso, in combination with salicylic acid, phenol and camphor and is prepared for physicians' use under the name of Chaparrin.

Chaparro Amargoso is a small thorny bush which grows in southwest Texas

DID YOU EVER ENJOY A MEAL IN BED?

Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY, CLEVELAND, O

Keeley Cure

For Drunkenness and Drug Using.

Please write us. Correspondence confidential.

Our Illustrated Handbook Sent Free On Request.

THE KEELEY INSTITUTE. Dept. B. Greensboro, N. C.

NEURILLA

NERVE CALMATIVE

NERVE HEALTH follows its use.

DOSE: Teaspoonful every half hour until nervousness is abated, then four times a day. Teething Children 10 to 20 drops.

DAD CHEMICAL COMPANY, NEW YORK.

and northern Mexico. Its natural order is Sima Rubaceae, the same as quassia. All parts of the bush have medicinal virtue, but the tendrils only are selected by the Matthewson Laboratory as possessing the most active principles.

Chaparrin is the result of a long series of experiments and represents a valuable agent for the treatment of most diseases of the skin. By its use cases of chronic eczema have been cured in a brief time after having been under treatment of older remedies for a long period without decided benefit. It is equally effective in psoriasis, ptyriasis, acne and kindred diseases, the results secured in much less time than by former methods of treatment.

Chaparrin is particularly effective in skin affections of the parasitic variety. When applied in sufficient strength it always allays the itching.

The preparations of "Pepsin" made by Robinson-Pettet Co., are endorsed by many prominent physicians. We recommend a careful perusal of the advertisement of this well-known manufacturing house. See page 303.

Celerina restores the tired and jaded nervous system to its normal condition, and brings about a feeling of buoyancy that will be pleasing to both physician and patient. A fair trial will confirm the verdict of the medical profession all over the world as to the virtues of this preparation. It is put up in palatable form, and is always uniform in strength.

Cactina Pellets.—I am fond of prescribing Cactina Pellets in those obstinate cases of palpitation caused

DOCTOR:

HAVE YOU USED LEU-KRE-TOL

THE NEW ANTISEPTIC

COMPOUND?

The Formula combines, under heavy trituration, the following drugs: Acinum Boracicum, Acidum Carbolicum, Menthol, Hydrastine Sulphas, Sodii Boras, Alumen, and Glycerinum. The powder will readily go into solution and is not only an Ethical, Scientific Pharmaceutical product, but also a pleasant, nor irritating and efficient preparation.

PHYSIOLOGICAL ACTION:

Antiseptic, Disenfectant, Deodorizer, Astringent and Antiphlogistic, reducing inflammatory exudates by its exosmotic action.

THERAPEUTICAL INDICATIONS:

Catarrhal conditions of nose and throat, tonsillitis, pharyngitis, hoarseness, etc. Usual ℞ being (Leu-Kretol ʒi Glycerine ʒiv Aquæ Q. S. ʒvi) either as Douche or Spray.

VAGINAL DOUCHE:

Especially valuable in Lescorrhoea, Vaginitis, Urethritis, Gonorrhœa, Pruritus, Septic conditions of Puerperal State, (being a superior remedy to Creolina, etc..) and in all offensive Uterine and Vaginal discharges. (ʒi to 1 Qt. of hot water.) Samples and literature on request.

Don't forget the name LEU-KRE-TOL.

Manufactured by the

LEU-KRE-TOL CHEMICAL CO.

Baltimore, Md.

Branch

Winston-Satem, N. C.

either by nicotine poisoning, indigestion or derangements of the uterus and its appendages, because it produces such happy and splendid results.

TITUS ALBRIGHT, M. D.
Hatfield, Pa.

Neurilla in Dentition.—I used Neurilla in my own family on my little girl who is teething. It produced splendid results; also in a case of severe nervous headache, and it acted most admirably.

W. A. BEANE, M. D.
Ikirt Block, Calcutta, O.

Sanmetto for Kidney, Bladder and Prostatic Troubles in the Old War Veterans.—I ordered a bottle of Sanmetto to use in a case of prostatitis, aet seventy-six years, a veteran of the Civil War and an old pensioner. He has used two bottles besides the one first ordered *and he has now completely recovered.* His statement of these facts in a G. A. R. Post meeting excited an intense interest among Grand Army men and has resulted in several letters of inquiry to myself regarding the treatment of his case. I take pleasure in giving this testimonial of the good Sanmetto will accomplish in these difficult cases of prostatitis, gravel and kidney trouble among Grand Army men. I unhesitatingly prescribe Sanmetto in every case indicated.

J. A. MEADE, M. D.
Worcester, Mass.

Chionia.—Too much cannot be said in favor of Chionia as a gentle and safe remedy in hepatic torpor. In a practice of over thirty years I have never prescribed a more effectual remedy in jaundice and chronic constipation.

D. F. MYERS, M. D.
Woolmarket, Miss.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

REVIEW OF MEDICAL AND SURGICAL PROGRESS.

The Treatment of Septic Processes by Intravenous Collargolum Injections.—(By Dr. Jaenicke, of Apolla. Abstracted from the *Deutsche Medicinische Wochenschrift,* Feb. 5, 1903.)—

Upon reception of a puerperal case in the local hospital, the following was noted:

Martha S., 19 years old, medium-sized, moderately well nourished. Temperature 98.80 F., pulse 98, pelvic measurements normal. Foetal head transverse to the pelvic strait; large fontanelle to the right, cervex dilated to half dollar size, the edge being thinned, tense and rigid. Pains weak and ineffective, foetal heart sounds very faint. Labor began two days before, but had not progressed for 24 hours.

Several incisions were made into the edge of the cervex; the pains improved slightly, but soon relaxed again, foetal heart sounds becoming weaker. Under anesthesia the head was with great difficulty brought down to the pelvic outlet in the transverse position, and finally rotated into the oblique. Child deeply asphyxiated; marked post partum hemorrhage; various vaginal lacerations and one of the perineum to the second

SOMNOS
$C_9H_{11}O_6Cl_9$
CHLORAETHANAL
ALCOHOLATE
A safe and reliable hypnotic and cerebral sedative, free from depressing effects upon the heart, respiration or vaso-motor centres. Liberal sample upon request :: ::
Introduced by
H. K. Mulford Company
CHEMISTS
Philadelphia New York Chicago

degree were carefully sutured. Thorough disinfection.

The first eight days post partum passed well, save for unimportant temperature variations. Catheterization for retention required from the first. On the ninth day chill and rise in temperature; right parametritis. Usual treatment together with Unguentum Crede instituted. Peritoneum became involved; abdomen greatly distended and very painful; constipation, vomiting; repeated chills. Patient rapidly getting worse; pulse miserable, hurried, hardly palpable and constantly varying. Complete anorexia, mental dullness and mild delirium.

Slight temperature fall by antipyretics and hydriatic measures; but it soon rose again to 104.70 F. Pulse hardly perceptible. Thirty grains anti-pyrin in 12 hours only reduced temperature to 103.30 F. Facies abdominalic; general condition extremely bad.

On the 19th day after admission, 2 drams of a 1 per cent. sterilized Collargolum solution were injected with anticeptic precautions into a superficial vein of the right elbow. Two hours later chill and temperature rose to 104.80 F. Exudate hard and firm, reaching as high as navel. Per vaginam a hard, non-fluctuating swelling was plainly palpable on right side. Restless night. Next day slight temperature fall; patient complained much of pain in right arm; otherwise condition unchanged.

Thirty-six hours after injection marked fall to 100 degrees F., and on the following day to 96.8 degrees F. Pulse 96, very weak, but plainly palpable. Pains in right arm increased, ex-

DOCTOR:

ELIXIR of MALTOPEPSINE

(TILDEN)

Is as reliable in CHOLERA INFANTUM as Quinine in Malaria.

It is absolutely reliable in all conditions arising from faulty digestion; palatable and acceptable to the most delicate stomach. Don't fail to investigate this most meritorious preparation.

Prepared Expressly for Physicians' Prescriptions.

Free Sample and Literature on Application.

Manufactured only by

THE TILDEN COMPANY

New Lebanon, N. Y. **St. Louis, Mo.**

tending from fingers to shoulder; nothing visible externally. There was neither redness nor swelling, yet patient cried out at least touch; arm seemed entirely paralyzed. Limb elevated and ice bags applied.

The exudate retrogressed visibly, and three days after injection there was complete apyrexia. The mass had entirely disappeared, the abdomen was soft and painless; all that could be found of the effusion were some indurating bands very deeply situated. Arm and shoulder still tender to pressure. On this day temperature rose again; there was pain and swelling of the left leg and a venous thrombosis developed which by the next day spread to the middle of the thigh. Eleven days after Collargolum injection she left bed completely cured.

This case shows nothing unusual until Collargolum was injected. It is the ordinary history of a septic parametritis due to parturition injuries, and the prognosis was extremely unfavorable; this opinion was fully shared by a colleague, Dr. Roehler, and by the experienced head nurse.

Dr. Jaenicke has long highly prized Unguentum Crede, and the various communications he saw concerning the intravenous use of Collargolum incited its employment by him. The result was certainly striking. Though fever did not diminish much during the following day, it ceased in 36 hours, and would certainly not have reappeared but for venous thrombosis occasioned by the shocking debility of the entire organism. And this thrombosis vanished with a remarkable rapidity and completeness. Most marvellous of all was the almost magical disapperance of the exudate. The supposition that perforation into rectum, vagina or bladder took place can be entirely excluded; the secretions and excretions were carefully watched for such an occurrence. Neither Dr. Rohler nor the author can recollect hav-

ing ever seen such rapid absorption under any other method of treatment.

The pain in the arm was a disturbing factor. It may possibly be that part of the fluid was not injected into the vein and escaped into the subcutaneous connective tissues, patient being very restless during the process. At all events, there was no permanent local ill-effect.

Whatever theory we may have as to the mode of action of Collargolum, the fact remains that an entirely hopeless case of septic parametritis was defebrilized in 36 hours and an exudate the size of a child's head was entirely resolved in four and a half days by a single injection.

Some New and Unusual Therapeutic Applications of Ergot.—(Dr. A. T. Livingston before New York County Medical Society.)—He said 30 years ago he began the use of ergot in the Insane Asylum at Utica, New York, to modify the circulation in the brain in cases of melancholic insanity. In 1878 in Philadelphia, was called to a man who had been retching violently for 4 hours and was exhausted. The pulse was full and bounding and patient complained of much pain. A syringeful of ergot was injected at intervals and by the time the syringful had been introduced the retching and pain had ceased, pulse soft and patient soon fell into a sleep which lasted for 6 hours. Some months after was called to same case when was suffering from nervous excitement due to having business reverse and was relieved by ergot, which acted by tonic effect upon blood vessels which were relaxed from lack of nervous impulse or paralysis from over distension. The drug thus contracted dilated vessels wherever found in the system and

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:

8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

JOHN R. IRWIN, M. D.,

CHARLOTTE, N. C.

Special Attention Given Surgery and Gynecology.

thereby restored circulation equilibrium. If it raises pressure in arteries it lowers it in the veins and capillaries. It restores circulatory equilibrium. If normal blood supply to brain is diminished; ergot by its effect on circulation gives most natural effect of any drug; often patient falls asleep in his office from hypodermic of ergot. In headache, most common complaint of humanity, it often gives immediate relief and will often prevent recurrence. In iritis gives remarkable relief and he wished the opatholmologists to try it also in glaucoma. He cites a case of opium poisoning, which was restored to consciousness—in short time by hypodermic injection of ergot, although respirations had fallen to 2 per minute. He claims acts well in angina pectoris and in many forms of heart disease by action on circulation, claims ergot will relieve shock. Method of administration is always hypodermically, using one drachm of Squibb's fluid extract in one ounce of water containing formaldehyde in proportion of 1-1000 or 1-2000 or small percentage of trikresol. He gives 25 to 30 minims of this solution, which represents 3 grains of the drug; use sterilized water and antiseptic should be added before dissolving the ergot and afterwards filtered. Minimum effective adult dose is 15 gtts., maximum 30 to 440 gtts. One syringe full would relieve a bad headache; if failed repeat in ½ hour. Always inject slowly and only get some muscular soreness; prefers deltoid for injection point.

Dr. Frederick in discussion spoke of favorable action of ergot in case of internal paresis following laporotomy. Dr. W. S. Toms had used successfully in two cases of pulmonary edema and also described its successful use in purpura in which its action was exceedingly prompt. Dr. Alexander Lambert spoke of a case of Angina Pectoris in which hypodermic of ergot relieved promptly after nitrate of amyl had lost its effect. Also spoke of its now frequent use in Bellevue in all form of acute alcoholism and in many gave relief in 24 hours.

In view of the above statements it is hoped the profession will give ergot a trial in this new field of therapeutic application.

Administration of Calcium Salts in Nephro Athcasis, Due to Uric Acid Calculi.—(By Alfred G. Crofton, Chicago.)—In discussing underlying principles the author states that phosphorus forms three salts with sodium mono-, di-, and tri-sodium phosphate; the first two ex-

THE PRESBYTERIAN HOSPITAL

Will Receive all Classes

Of Medical and Surgical Cases,

(Except Contagious.)

A Full Corps of PHYSICIANS

and SURGEONS in Attendance.

Address,

PRESBYTERIAN HOSPITAL,

Charlotte, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain Cactina, the active proximate principle of Cereus Grandiflora.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for
INDIGESTION

A palatable preparation of Panax Schinseng in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

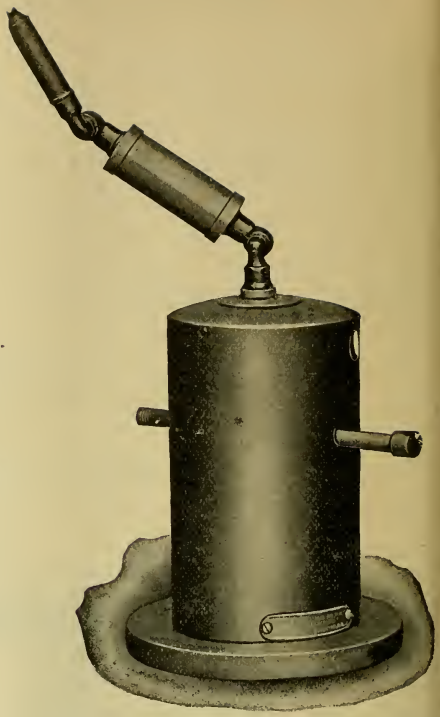
st normally in the urine; uric acid is soluble in di-sodium-phosphate but insoluble in the mono-sodium phosphate; he mono-salt therefore, precipitates ıric acid and favors formation of uric ıcid calculi, the di-salt prevents by keeping uric acid in solution; hence, in reatment must try to drive out monohosphate and increase renal excretion of di-phosphate. Can do this either 1, y decreasing phosphoric acid entering lood by the kidneys—or 2, by increasng sodium in renal blood. The decrease of the phosphoric acid is effected by cutting off foods containing large amount of phosphate and also by cutting off albumens whose neucleins supply phosphorus to the tissue to be oxidized into phosphoric acid and in addition we must assist other organs than the kidneys in removing the phosphoric acid which arises from waste of bodily tissues. This best done by the calcium salts; the carbonate is best in doses of 15 grains 3 times daily; this forms calcium phosphate with the phosphoric

The Hopkins Compressed Air Heaters

Electric Gas Alcohol

The Perfect Instrument for treatment of the ear with superheated air. Practically indestructible. Patented in all features. All kinds of special electric heaters for medical work. Write for booklet.

THE TERRY HEATER CO.,
Cleveland, Ohio.



acid in the blood and this calcium phosphate is largely eliminated by the bowels while magnesium, sodium and potassium are thrown off by kidneys.

We may add the necessary amount of calcium salt by giving lime water freely in ordinary pure water. To diagnose uric acid calculi, a fragment of the calculus is powdered and treated in test tube with cold dilute H. Cl.; if it effervesces it contains carbonates; if it dissolves it is not an uric acid stone or may dissolve a portion in H N O 3 and few drops of solution evaporated on a porcelain dish should leave a red residue, which turns purple when touched with ammonia or reddish blue from N A O H or K O H. Van Noorden reports 21 cases treated with calcium salts with only two recurrences.—*Jour. Am. Ass.*

What Advice Should be Given a Woman Suffering From Fibroid Tumor of the Uterus?—J. R. Goffe, (*Medical News*, February 7, 1903,) sums up his paper as follows: The proper treatment for fibroid tumor of the uterus, speaking in a broad way, is removal by operation, and that immediately—whether the tumor be large or whether it be small, whether in a married or in a single woman, excepting only women of very advanced years, and those in whom the tumor is complicated by pregnancy. In the last the course to pursue will depend largely upon the circumstances and conditions

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these Preparations.

A

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

℞ Each fluidounce contains:

Hypophosphites	Soda	2 gr.
"	Lime	1½ gr.
"	Iron	1½ gr.
"	Quinine	¾ gr.
"	Manganese	1½ gr.
"	Strychnine	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate	Sodium	12 grains
"	Potassium	4 "
"	Calcium	4 "
"	Iron	2 "

FREE Monohydrated Phosphoric Acid 16 grs.

Each flu'dounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE.—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

C

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence of a sedentery life, coupled with nervous and mental stal strain.

Reliable Pepsin is one of the best Digestive agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating. Children, one-half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromatic menstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable.

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50.
N. B.—We also make 25 per cent. strength.
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

Saloform, in Powder, per ounce	$1 25
Saloform, 5-grain Tablets, per 100	1 25
Saloform Elixir, pints	2 00
Solution Albuminate of Iron, Syrup Albuminate of Iron Comp, pints	1 00
Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

Please specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

Founded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

Parasitic Skin Diseases

Are more aggravating than many of the more serious conditions. By alleviating the distressing symptoms and effecting a speedy cure, the physician earns the gratitude of these patients.

CHAPARRIN

has proven to be a remarkable remedy in this class of diseases. It is superior to anything heretofore produced as a local application in diseases of the skin. Chaparrin is an entirely

NEW DERMATOLOGICAL REMEDY

representing the active principles of the Texas shrub Chaparro Amargoso, in combination with Salycilic Acid, Phenol and Camphor. The results obtained in the treatment of Scabies, Acne, Tinea, Herpes, Ethiriasis, Echthyma, Eczema, Psoriasis and kindred skin diseases, are exceedingly gratifying, speedy and permanent relief being secured in much less time than by former methods of treatment. When applied in sufficient strength, Chaparrin always allays the itching.

2 oz. bottle, mailed, $1.00
4 oz. bottle, mailed $1.75

Chaparrin is sold exclusively for physicians' use; all orders for it should be sent direct to the laboratory.

Address,

THE MATHEWSON LABORATORY,
MARSHALL, TEXAS.

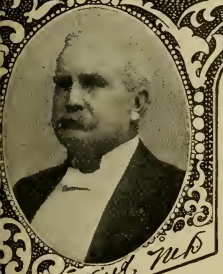
of the individual patient. As a rule, the majority of cases of fibroid tumor of the uterus complicated by pregnancy will go to full term and be delivered normally. In the hands of an expert, Cæsarian section at full term is safer for mother and child than myomectomy. During gestation, in the rare instances in which such an extremity is required, it is better to take the risk of such a procedure, the necessity of which is very remote, than to destroy the child by inducing miscarriage or taking the risks of myomectomy.—*Med. Age.*

Renal Decapsulation for Chronic Bright's Disease.—(By Geo. M. Edebohls, in *Medical Record.*)—Edebohls first performed his operation in 1898 upon a girl of 20 years, who has since married, is now pregnant; examination of her urine shows normal condition. Nineteen cases were operated upon from 1898 to 1901 and during the year the author has operated upon 32 additional cases. There were 29 females and 21 males and all adults except one being 4½ years of age, Results, 7 died within 17 days after operation; 7 of the 47 cases operated on died in from two months to 8 years, average life after operation 20 months; two cases show partially satisfactory improvement; 22 cases are in various stages of favorable improvement of satisfactory nature and in which from 2 to 15 months have passed since operation. Urine of several of these cases is free from albumen and casts but have not shown 6 months period of healthy urine, which is necessary to pronounce a cure. One case in which one kidney was decapsulated went four years with normal urine but now Brights returned. Nine were cured and have remained well for periods varying from one year

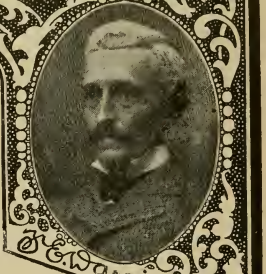
SOMETHING FOR LEISURE HOURS

STORIES OF COUNTRY DOCTOR

RECOLLECTIONS OF A REBEL SURGEON



ALL WORK AND NO PLAY MAKES JACK A DULL BOY



Here are two books chock full of wit, fun and pathos, that should be on every doctor's table. Their titles tell the story. They speak for themselves. Each $1, post-paid

The Clinic Publishing Company, - Ravenswood Station, Chicago.

and 9 months to 10 years. Cases were not selected; many had various heart and vascular changes accompanying chronic nephritis; in numbers kidneys were diminished ½ to ¼ in size. In passing judgment on justifiability of this procedure must remember that under usual natural course many cases of nephritis, treated or untreated, often show periods of improvement as to general health and kidneys. To prove that decapsulation cures must 1, uniformly get improvement or cure after operation; 2, that cure is lasting; 3, that in majority of cases improvement is always steady and progressive. Results thus far justify hope that some lives will be prolonged and others saved. Time and number of cases too small to ungratefully condemn or praise surgical decapsulation in this serious disease.

Operation should be done by operators having had practical experience in renal surgery. Long twelfth rib and narrowness of space between last rib and ilium or if kidney is highly attached and very immobile it is difficult to carry out operation satisfactorily as the latter necessitates decapsulation with kidney lying deeply in wound; gloved index finger is best instrument for removing capsule under this condition. In parenchymatous and diffuse nephritis capsule is not very adherent and is much more easily detached than in interstitial form in which, owing to after condition, the kidney substance pieces may come away attached to capsule.

A clergyman told from his text
How Solomon was barbered and vexed;
And told it so true
That a man in a pew
Got rattled, and shouted out, "Next!"

Diseases of the Heart and Arterial System.—By Robert H. Babcock, A. M., M. D., Professor of Clinical Medicine and Diseases of the Chest, College of Physicians and Surgeons (Medical Department of the Illinois State University), Chicago; Attending Physician to Cook County Hospital and Cook County Hospital for Consumptives; Consulting Physician to Mary Thompson Hospital, Hospital of St. Anthony de Padua, and of Marion-Sims Sanitorium; Fellow and former President of the American Climatological Association; Member of the American Medical Association, etc. Illustrated with One Hundred and Thirty-nine Electrotypes and Three Full Page Colored Plates. From the Press of D. Appleton & Company, New York and London, 1903.

In the preparation of the work the author had in mind the need of the student and practitioner of medicine, and has presented his subject in a very practical manner. Theory and specialization have been practically omitted and the text confined to clear facts.

Anatomy, physiology and physical signs are not elaborated extensively in this volume, the author giving these sufficient consideration to render the subject under discussion clear, and referring the reader for mere details to the text book devoted to each. Treatment is made the strong point in this volume, and this part of the subject will be found far more detached than is the case in most books dealing with the heart, hence the book is of especial value to the general practitioner and student.

The illustrations are remarkable for their clearness, one point that is of especial value being the outlining on the chest wall by red lines or dots the position of the part of the heart or great vessels that the illustration is intended show and the text to describe. The type is of good size and the paper of fine quality, thus bringing out the plates and print with a remarkable degree of clearness.

The volume is to be commended in every way for the student and practitioner.

Surgical Emergencies; The Surgery of the Head.—By Bayard Holmes, B. S., M. D. Professor of Surgery in the University of Illinois; Professor of Clinical Surgery in the American Medical Missionary College, Chicago, Ill.; Attending Surgeon to the Chicago Baptist Hospital. D. Appleton & Co., New York.

This is the first of a series of works

"THE KEY TO HEALTH."

Jackson Springs, Moore, N. C.

A health and pleasure resort conveniently located in the Long Leaf Pine section in North Carolina, where malaria and mosquitoes are unknown The nights are cool, the air pure and balmy. Hotel accommodations unsurpassed; hot and cold baths. Those seeking amusements will find up-to-date Golf Links, Tennis Court, Croquet Grounds, Ten-Pin Alley, etc. Transportation facilities first-class; telegraph and express offices conveniently located.

Jackson Springs Water has long been used with excellent results in many chronic diseases, and is considered by all who have used it as a specific in dyspepsia and indigestion.

It increases the appetite, and enables the patient to digest all food taken without trouble or inconvenience in any way, thereby increasing the strength of the patient and producing that condition of health so much desired. Catarrh of the liver, stomach or bowels, where the organic changes have not been too extensive, is always benefited and many times, most miraculously cured by the use of this water. In all cases of Cystitis, not due to stone, Jackson Springs water relieves immediately, if taken properly, and will in short time make a complete cure. Nervousness, when not due to some organic condition, is relieved at once by the use of this water, and especially is this the case when the nervousness is caused by over-work, indigestion and malassimulation. This water exercises an indisputable therapeuticial influence in chronic Bright's disease, patient at once gaining in strength with the power to take and digest food, and at the same time an analysis shows that the condition of the kidneys are improving.

In Renal Calculi, Gout, Rheumatism, Uric Acid, Dethearis, Anæmia, Sleeplessness, or brain fag, Jackson Springs water may safely trusted to relieve in a short time if taken properly.

Hypernemia of the Liver, with its furred tongue, nausia, bilious, diarrhœa, sallow complexion, headache, irritability, general feeling of depression, and malaise are very successfully treated by a course of Jackson Springs water.

This water possesses to a remarkable degree the power of effectively cleansing the bowels, stimulating the liver and expelling poisonous matter which may have accumulated in the system, and thus giving the patient a new lease on life and making him feel like a new man.

Children do well here, especially those who have recently suffered from bowel and stomach troubles Jackson Springs is an ideal resort for those patients convalesing from recent sickness. The water is delightfully cool and refreshing, and can be taken in large quantities.

Analysis: Jackson Springs Water.

North Carolina Agricultural Department, Experiment Station.

Analysis No. 6,147. Raleigh, N. C., Jan. 3, 1890.

Sir:—The sample of mineral water sent to the Station for analysis, in a demijohn marke dP. M. Wilson, contains on evaporation, per U. S. Gallon—

SOLIDS.		
Sulphate of Potash	.577	grains
Sulphate of Soda	.263	"
Chloride of Soda	.825	"
Carbonate of Soda	.578	"
Carbonate of Lime	1.721	"
Carbonate of Magnesia	.833	"
Oxide of Iron and Aluminum	.181	"
Sodium Phosphate	Trace	
Silica	2.567	"
Total	7.546	"

Your obedient servant,

H. B. BATTLE, [Seal.]
Director

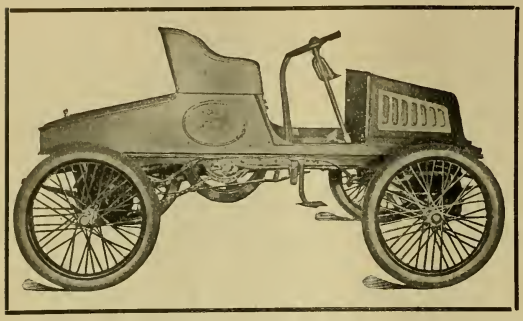
Dr. A. C. Bethune, resident physician, is located in hotel and will be pleased to send testimonials and give any other information desired.

For space and rates address

C. L. BAXTER, Manager Jackson Springs Hotel,

Jackson Springs, N. C.

THE "ZENTMOBILE"



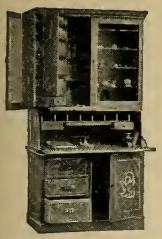
Where quality is desired, where comfort, durability and genuine pleasure is demanded in an automobile, this machine should be investigated before ordering.

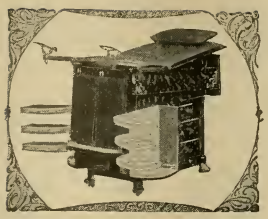
We are all after results in an automobile, as well as everything else, and the best results are only obtained by years of persistent experimenting. We have passed through this stage. Don't buy an experiment. Get something that will require the least attention. It is a "ZENTMOBILE."

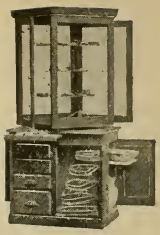
Get price and full particulars.

to be published upon Surgical Emergencies. It contains nearly 600 pages, numerous illustrations and 74 plates of great excellence The author states in his preface this series of books, to be issued upon the every-day surgery of the human body, has been in course of preparation for a number of years. The surgery of the eye, ear, nose, throat and other well established specialties, is omitted, the dominant idea being to place clearly before the reader the commoner surgical cases which are encountered by the average practitioner in his daily work. With this in view, every effort has been made, and made successfully, to present the various subjects vividly and harmoniously before the reader. A very pleasing and efficient plan of enabling the student to grasp the subject matter clearly in the mind, is by the detail of clinical cases. illustrative of the class of injuries or diseases under discussion. No attempt is made to exhaustively consider those rare surgical conditions which properly come under the care of the surgical specialists, but all the commoner surgical diseases and emergencies are thoroughly gone into. The practitioner will find of especial value the chapters on Brain Socolization, Fractures of the Skull, Compression and Concussion; Tumors of the Brain and the Various Deformities of the Head and Face. The chapter considering the subject of Hare Lip and Cleft Palate will amply repay a careful study, while the one upon Otitis Media and its relation to diseases of the brain, also contains a very necessary amount of information for the general man. Other chapters deal with Epilepsy, Pachymeningitis, Insanity, Empyema of the Accessary Sinuses of the Nose, Parotid Gland, Facial Neuralgia, Tumors of the Face and Scalp, etc.

The ground, as may be inferred from the above incomplete list of subjects, is most thoroughly covered, and the book will well repay a careful perusal.







A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your patients. Therefore, in the selection of your equipment you should exercise great care. The testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

Are the best and are adapted to all lines of regular and special practice. They are superior in workmanship and design, and include more conveniences than any other line on the market. (Catalogue "A" fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

A Sanatorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

Beautifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

MAPLEWOOD SANATORIUM, **Dept. 21, Lebanon, Ohio.**

---

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &C.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents.

Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

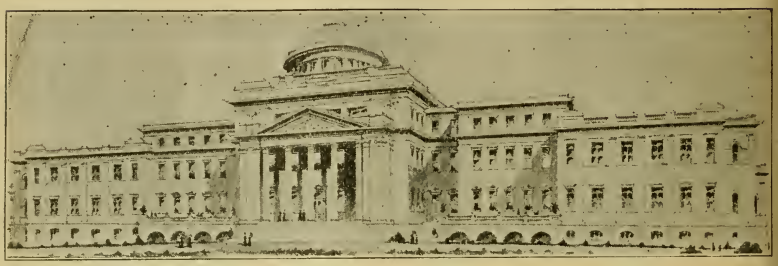
POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

Presbyterian College for Women....

Charlotte, N. C.



Magnificent New Buildings. Every Essential of Health and Comfort. Good Fare. Experienced Teachers. Standard Advanced. Music and Art our Specialties. Charges lower than any other School of same grade in the South.

REV. J. R. BRIDGES, D. D., President.

MEDICAL NEWS AND ITEMS.

The plague is steadily increasing throughout India.

There are twenty-seven vacancies in the grade of assistant surgeon in the United States navy.

The inhabitants of the island of Molokar, one of the Hawaiian Islands, object strenuously to the establishment on their island of a national leprosarium, as proposed by a committee of the Senate.

Two Physicians Suspended.—The Alumni Association of the Michigan College of Medicine and Surgery lately suspended two of its members, on the ground that they had violated the rule which forbids its members to advertise. One of the physicians will appeal.

University College of Medicine.—Richmond, Va., May 26, 1903. Dear Doctor:—The director of the Board of Regents of the State of New York, writes us as follows: "It gives me pleasure to inform you that we can register the University College of Medicine in full for admission to the licensing examination of the State of New York." This means that the medical education given by the University College of Medicine is recognized by the authorities as equal to that required of the medical colleges of New York, and that our graduates will have the same standing in this respect as the graduates of any New York college. The New York regulations form an acknowledged standard and this recognition is accordingly prized. It may, however, interest you to hear that in New York the standard of this college is conceded to be higher. Respectfully, UNIVERSITY COLLEGE OF MEDICINE.

A Physician's Reputation Depends

On the Cures He Can Make.

We can assist you, and we hope the very best men in the profession will read this :

Echols Piedmont Concentrtaed Iron and Alum Water has been prescribed for years by a great number of eminent practitioners, principally in Virginia, but this Company has been incorporated with $50,000 capital, and is now calling the attention of every physician in the United States to its merits.

Our Concentrated Water is not a patent medicine, but is the product of the natural water as it comes from the Springs, reduced 160 times by a process which retains all its medicinal properties, and we do not believe it has an equal for the cure of Chronic Diseases, such as Indigestion, Scrofula, Rheumatism, Female Complaints, Stomach and Bowel Troubles, Catarrah, Kidney and Bladder Complaints, and all Blood Diseases.

The analysis found below should commend itself to every physician.

ANALYSIS.

UNIVERSITY OF VIRGINIA,
CHARLOTTESVILLE, VA., March 19, 1895.

Dear Sir: The Piedmont Iron and Alum Mass sent me by you contains :

Ferric Sulphate	14.732	Ammonium Sulphate	Trace
Ferrous Sulphate	17.236	Lithium Sulphate	.071
Zinc Sulphate	.098	Hydrochloric Acid	1.687
Aluminum Sulphate	3.782	Aluminum Chloride	15.022
Cobalt Sulphate	.069	Meta-Salicic Acid	.311
Manganese Sulphate	.083	Phosphoric Acid	Trace
Copper Sulphate	.087	Insoluble Siliceous Matter	.808
Nickel Sulphate	.021	Organic Matter	.205
Calcium Sulphate	5.644	Water	34.037
Magnesium Sulphate	4 195		99.728
Sodium Phosphate	1.218		
Potassium Sulphate	.395		

J. W MALLET,
Prof. of Chemistry, U. of Va.

his analysis is made from the Concentrated Water reduced to Mass, but we have discontinued making the Mass, as the Concentrated Water produces better results)

o any physician wishing to test our preparation on some particular case, we will send 18 oz. bottle free of charge

For Sale by all Druggists; 8 oz. bottles 50 cents. 18 oz. bottles $1.00.

J. M. ECHOLS CO., *Lynchburg, Va.*

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED IN 1881—OPENED IN 1882.

The New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant, and the hospital wards adjoin the lecture rooms. Since the fire in 1896, a new building has been erected and thoroughly equipped, and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James P. Tuttle, M. D.; John A. Wyeth, M. D.
MEDICINE—Isaac Adler, M. D.; Morris Manges, M. D.; W. H. Katzenbach, M. D.; J. D. Nisbet, M. D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt. H. Wylie, M. D.; Brooks H. Wells, M. D.; W. Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—August Seibert, M. D.
DERMATOLOGY—Edward B. Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O. Born, M. D.; W. E. Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M. D.; Robert C. Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederich Whiting, M. D.
EUROLOGY—B. Sachs, M. D.
OBSTETRICE—Edward A. Ayers, M. D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York.

THE CHARLOTTE OBSERVER,

CHARLOTTE, N. C.

J. P. CALDWELL, Editor. DAILY AND SEMI-WEEKLY.

North Carolina's Foremost Newspaper.

Independent and fearless; bigger and more attractive than ever. The most complete telegraphic Press reports in existence. All the news of the world. Complete Daily reports from the State and National Capital

SUBSCRIPTION PRICE.

Three Months	$2 00
Six Months	4 00
One Year	8 00

THE SEMI-WEEKLY OBSERVER, Published on Tuesdays and Fridays at $1 00 per year.

CASH OR CREDIT. Catalogue FREE.

PRICE $33.50

It will pay you to send for our Catalogue No. 6, quoting prices on Buggies, Harness, etc. We sell direct from our Factory to Consumers at Factory Prices. This guaranteed Buggy only $33.50; Cash or Easy Monthly Payments. We trust honest people located in all parts of the world.

Write for Free Catalogue.

MENTION THIS PAPER.

CENTURY MF'G CO. DEP'T 352 East St. Louis, Ill

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

PROTARGOL

The Non-Irritating Substitute for Nitrate of Silver.

HEDONAL

The Promoter of Natural Sleep.

TANNIGEN

The Intestinal Astringent

LACTO-SOMATOSE

The Food for Diarrheal Diseases.

FERRO-SOMATOSE

The Ferruginous Nutrient and Tonic.

HELMITOL

The Urinary Antiseptic, Analgesic.

THEOCIN

The Most Powerful Diuretic

Samples and Literature supplied.

Mellin's Infants' Food

Babies' pink cheeks indicate good health.

Good health comes with proper food.
Mellin's Food is a proper food.

Samples and Literature to Physicians upon request.

MELLIN'S FOOD COMPANY, BOSTON, MASS.

ERGOAPIOL (SMITH)

THERAPEUTIC QUALITIES

THE absolute absence of all OPIATES, NARCOTICS, and ANALGESICS, thus offering, instead of false roundabout and mere transitory relief, a true and scientific treatment for AMENORRHEA, DYSMENORRHEA, and other IRREGULAR MENSTRUATION.

In these conditions and the most obstinate cases of SUPPRESSED and RETARDED MENSTRUATION, Ergoapiol (Smith) (though devoid of the above unpleasant features, which are so often followed by a sad sequela) possesses a remarkable power to obviate pain and to bring about a healthy activity of the menstrual functions through its direct tonic and stimulating effect upon the Uterus and its appendages.

CAUTION.

To obviate Substitution or other possible error in compounding, it is advisable always, besides specifying ("Smith") when prescribing Ergoapiol (Smith), to order in Original Packages only, as in facsimile prescription appended.

These packages contain twenty capsules each, and are so constructed that all printed matter pertaining thereto can be readily removed.

℞

Ergoapiol. (Smith)... Caps. XX.
Orig. pack.

MARTIN H. SMITH CO.,
NEW YORK, N. Y

SOLE BRITISH AGENTS:
THOMAS CHRISTY & CO.,
LONDON, E. C.

BROADOAKS SANATORIUM.

ISAAC M. TAYLOR, M. D.

Morganton, North Carolina.

A Private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

WOMEN

Suffering from an Aching Back, Bearing Down Abdominal Pains, or any abnormal condition of the Uterine System, should be given ALETRIS CORDIAL RIO in teaspoonful doses four times a day.

Rio Chemical Co., New York.

St. Luke's Hospital,

1000 West Grace St.,

RICHMOND, VIRGINIA.

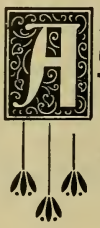
Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,

RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.



S The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our
. . . **regular eleven-ounce hexagonal bottle,** . . .
you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

THE ANÆMIAS

yield readily to organic, or true animal iron treatment.

A resort to *inorganic* iron preparations or tonics, serves only to stimulate corpuscular proliferation without supplying sufficient nutrition to mature the blood cells.

A preparation of **TRUE ANIMAL IRON** that will supply every deficiency in the blood, and assure the proliferation of *all* the corpuscles to a full and sturdy maturity, is found in

BOVININE

It contains **10% ANIMAL IRON, 20%** coagulable albumen, and every element of nutrition of the animal, mineral, and vegetable kingdoms.

It is readily absorbed by the tissues, requires little or no digestion, is prompt and reliable in stimulation and support, and is a nutrient of the very highest value.

BOVININE administration causes quick increase of the leucocytes, and a consequent arrest of all pathological processes.

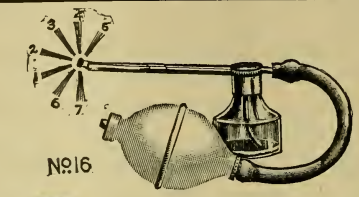
BOVININE is advertised to the Profession only, and is a strictly ethical physician's preparation. Its formula is open to all.

A postal request brings you our Hand-book on Haematherapy, giving valuable information to both the general practitioner and the specialist.

THE BOVININE COMPANY,

75 W. HOUSTON ST., NEW YORK.

DeVilbiss Universal Atomizer No. 9. All Metal.—Will throw a spray in any direction desired. Heavy oils and vaseline by heating, light oils and watery solutions without. Can be used with rubber bulb or compressed air. **Price to Physicians, $1.25. Postage 6 cents.**



Two bottles furnished with this instrument. One to be used for water solutions and the other for oil.

The DeVilbiss Universal Atomizer, No. 16.—Unexcelled for patient's own use. **Price to Physicians $1.25.** Some of the advantages of the DeVilbiss Universal Atomizers over others are:

1. They throw a spray of any kind of liquid, oils, aqueous or alcoholic solutions.
2. The point can be turned in any direction, consequently it will do the work of three atomizers of any other style without extra tips, which are liable to be lost when you need them most.
3. By closing hole in cap on bottle with the finger, a very coarse spray or stream will be thrown which serves to clean it out or can be used for douching.
4. Medicine may be mixed in the bottle by closing the hole on cap of point with the finger, and turning on air current or compressing the bulb
5. All parts are interchangeable; any part can be replaced that may be broken or lost.
6. Our improved connection enables them to be used with either a bulb or cut-off without extra fittings.

DIRECTIONS AND GUARANTEE TO PURCHASER.

To make aceptic, unscrew hard rubber piece, place in a carbolized solution and boil metal part and bottle.

To clean Spray Tube, put cleansing solution in cup, place thumb tightly over hole in cap on bottle and by using air pressure a heavy spray will be thrown from point of tube. Should this fail to clean the tube, unscrew cap "A" and remove particles with a toothpick. Be sure to run it through small opening as this must be kept clean in order to have perfect atomization. Should it not work, remove point "C" as shown in illustration with a knife blade; take out all particles with a pin or tooth-pick from the openings in the point and replace in the same manner as removed with the letters "UP" on the upper side. Should this fail, return to us and we will repair or replace free of charge.

DeVILBISS MFG. CO., Toledo, Ohio.

PEACOCK'S BROMIDES

PURITY
THE BEST IS THE CHEAPEST

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.
DOSE:
One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day.

OD CHEM. CO., NEW YORK.

A Bath for Beauty and Health.

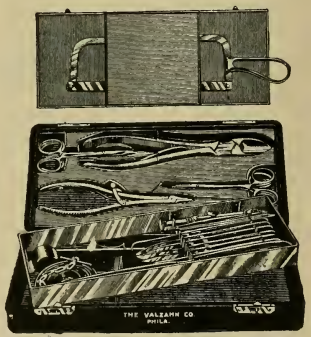
Allen's Fountain Brush and Bath Outfit

Friction, Shower and **Massage Combined.** The only Sanitary Bath Brush that at one operation thoroughly cleanses the skin, imparting a healthy tone and glow, and puts one in a condition to resist colds, la-grippe and all contagious and infectious diseases. Furnished either for bath tub connection, or with our fountain and Safety Portable Floor Mat. Enabling one to take a perfect spray and frictional bath in any room. With this outfit one is independent of the bath room, as a better bath can be taken with two quarts of water, than with a tub-full the old way. Insures a clear complexion, bright eyes, rosy cheeks, cheerful spirits, sound sleep. Should be in every home, and every travelers trunk or grip. Full outfit No. 2, consisting of Fountain Brush; combination rubber hot water bag; bath fountain and syringe and safety mat. Price $5.50.

Agents are making from $25 to $75 per week selling these outfits. Send for FREE booklet, "The Science of the Bath," prices and terms.

THE ALLEN MANUFACTURING CO., 429 Erie St., Toledo, O.

Valzahn Co.'s Amputating and Trephining Case.



Contents—1 Amputating Knife, 1 Scalpel, 1 Finger Knife, 1 Tenatome, 1 Curved Sharp Bistury, 1 Curved Blunt Bistury, 1 Tenaculum, 1 Grooved Director, 1 Pair Probes, 1 Trephine, 1 Tourniquet, 1 Dressing Forcep, 1 Amputating Saw, 1 Bone Forcep, 1 Needle Holder, 1 Straight Scissor, 1 Curved Scissor, 2 Pean's Haemostatic Forceps, 2 Tait's Haemostatic Forceps, 6 Needles, 1 Card Silk, 1 Coil Silver Wire, 1 Coil Catgut. All in fine Leather Case, $17.00. Knives are in Aluminum Rack removable to facilitate sterilization. **The Valzahn Company,** Manufacturers and Importers of Surgical Implements and Hospital Supplies, 132 South 11th Street, Philadelphia, Pa.

PAN-PEPTIC
ELIXIR
PREFERRED BY AND FOR
LADIES AND CHILDREN.

SHARP & DOHME'S

PAN-PEPTIC

ELIXIR TABLETS

APPETIZING TONIC DIGESTIVE
PALATABLE EFFECTIVE

THESE ELEGANT PRODUCTS
ASSIST DIGESTION PREVENT INDIGESTION
RELIEVE AND OFTEN CURE

INDIGESTION

DIARRHEA AND CHOLERA INFANTUM

MADE ONLY BY
SHARP & DOHME
BALTIMORE
CHICAGO - NEW ORLEANS - ST. LOUIS
NEW YORK

PAN-PEPTIC
TABLETS
25¢ - 50¢ - 100¢

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

University of Pennsylvania

Department of Medicine.

The 138th Annual Session will begin on the last Friday in September, 1903, at 12 m., and will end at Commencement, the third Wednesday in June.

The Curriculum is graded, and attendance upon four annual sessions is required.

Practical Instruction, including laboratory work in Chemistry, Histology, Osteology, Bacteriology, Pathology, Physiology and Pharmacy, with bedside instruction in Medicine, Surgery, Gynæcology and Obstetrics, is a part of the regular course, and without additional expense.

For catalogue and announcement containing particulars, apply to

DR. CHAS. H. FRAZIER, Acting Dean,

36th St. and Woodland Ave., Philadelphia.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.

Dr. W. F. Goldsmith, General Surgery.

Dr. C. C. Stockard, General Medicine and Drug Habits.

Dr. S. G. C. Pinckney, Nervous Diseases.

Dr. J. M. Crawford, Eye, Ear, Nose and Throat.

Dr. Michael Hoke, Orthopoedic Surgery.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

17 W. Cain Street, Atlanta, Ga.

Table of Contents.

PAGE

EDITORIAL NOTES:

The Etiology of Sleeping Sickness 313

The Discovery of the Germ of Smallpox 313

The Power of Organization 314

ORIGINAL COMMUNICATIONS:

Surgery of the Prostate Gland: A. J. Crowell, M. D. 315

Drugs and Whiskey Habit and Treatment: S. M. Crowell, M. D. 319

CONSTITUTION AND BY-LAWS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA 325

SELECTED PAPERS 332

NEWER MATERIA MEDICA 336

AMONG THE MAGAZINES 346

MEDICAL NEWS AND ITEMS 348

Hagee's Cordial Cod Liver Oil
Comp,
Tonic,
Stimulant,
Reconstructive,
Alterative,
Nutritive,
Digestive.
Causes rapid accumulation of flesh and strength, gives tone to the functions of assimilation and secretion, promotes metabolic changes, encourages healthy cell action and excretion.
HAGEE'S CORDIAL contains all the medicinal principles of pure Norwegian Cod Liver Oil without the grease. No decomposed liver tissue. No fishy odor. No eructation. Formula on every bottle.
PRESCRIBE
Cord. Ol. Morrhuae Comp. (Hagee)
and your patients will take it.
Put up in 16 oz. bottles only
KATHARMON CHEMICAL CO.
St. Louis, Mo.
NEVER SOLD IN BULK

Index to Advertisers.

	PAGE
Fairchild Bros. & Foster.....Cover	1
Parke, Davis & Co. ..... "	1
Lambert Pharmacal Co..... "	2
Mr. Fellows..... "	3
The Sanitarium..... "	4
Glycosine Phosphate Co ..... "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.....	1
Martin H. Smith Co	2
Broadoaks Sanatorium.....	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.	5
DeVilbiss Mfg. Co.....	6
Peacock Chemical Co.....	7
Od Chemical Co.....	7
Allen Mfg. Co.....	7
The Valzahn Co.....	7
Sharp & Dohme.....	8
University of Pennsylvania.....	9
The Halcyon Retreat.....	9
Katharmon Chemical Co.....	10
Mariani & Co.....	11
The Antikamnia Chemical Co.	11
Oakland Chemical Co.	12
Battle & Co.	12
Kress & Owen Co.	13
The Purdue Frederick Co.....	14
Rio Chemical Co.	14
Wm. R. Warner & Co.	343
North Carolina Medical College.....	345
Invalids Table Co.	346
The Keeley Institute.....	346
Dad Chemical Co.....	346
Leukretol Chemical Co.	347

	PAGE
H. K. Mulford Co.....	349
The Tilden Co.....	350
College of Physicians and Surgeons of Baltimore	350
Dr. E. R. Russell.....	351
Dr. A. J. Crowell.....	351
Dr. W. O. Nisbet.....	351
Dr. W. H. Wakefield.....	351
Dr. A. M. Whisnant	352
Dr. John R. Irwin.....	352
The Presbyterian Hospital.....	353
Sultan Drug Co.	353
The Abbott Alkaloidal Co.....	354
Robinson-Pettet Co.	355
The Mathewson Laboratory.	356
The Botanic Drug Co.....	356
The Fairbanks Co.....	357
Jefferson Medical College.....	358
University College of Medicine.....	358
The Terry Heater Co	358
Jackson Springs.....	359
Single Centre Spring Co.	360
University of Maryland.....	360
Chattanooga Medical College	360
W. D. Allison Co.....	361
Maplewood Sanatorium.....	361
Munn & Co.....	361
R. L. Polk & Co.....	361
Presbyterian College for Women	362
Elizabeth College and Conservatory of Music	362
J. M. Echols Co.	363
N. Y. Poly. Med School and Hospital	364
The Charlotte Observer	364
Century Mfg. Co.....	364

Written Endorsements From More Than 8000 Physicians.

VIN MARIANI INTRODUCED NEARLY HALF A CENTURY AG

"The Preparation which made Coca known as a remedy!"

Priority, Facilities and Processes of Manufacture

MAINTAIN MARIANI COCA PREPARATIONS INIMITABLE.

AVOID "COCA WINES" Extemporaneously made with **Cheap Wine and Cocaine.**

Substitutes harm Patient and Physician and betray confidence in the unique properties of Coca

VIN MARIANI

Represents TRUE COCA with a Sound Nutritious FRENCH WINE;

An Adjuvant to all other Remedies in

Convalescence — Wasting Diseases — Neurasthenia

And Allied Conditions from any cause.

THE COCA LEAF

A PERIODICAL ADVOCATING THE RATIONAL USES OF COCA

MAILED FREE TO PHYSICIANS ON REQUEST.

Inquiries from Physicians Receive Ethical Consideration.

MARIANI & CO.,

52 West 15th Street, New York.

PARIS. LONDON, BERLIN, MONTREAL. Laboratories: Neuilly Sur-Seine, FRANCE

"Hill's Reference Chart"

DOCTOR: You are entitled to a copy of "Hill's Chart," and if you have not received it, (delivered free of charge), send your name and address to

The ANTIKAMNIA CHEMICAL COMPANY
ST. LOUIS, MO., U. S. A.

And you will get one by return mail!

WHY YOUR CHART MAY HAVE FAILED TO REACH YOU!

"You may have changed your address"
"Your postal card may have gone astray"
"Your Chart may have been lost in transit"

BE SURE TO MENTION THIS JOURNAL

PAPINE IS THE PAIN-RELIEVING PRINCIPLE OF OPIUM. ONE CAN DISPENSE WITH OPIUM THE NARCOTIC; ONE CANNOT DISPENSE WITH OPIUM THE PAIN-RELIEVER. PAPINE PRODUCES NO TISSUE CHANGES, NO CEREBRAL EXCITEMENT, NO INTERFERENCE WITH DIGESTION.

Sample (12 oz.) Bottle Ecthol Sent Free on Receipt of 25 Cts. to Prepay Express.

FORMULA:--One fluid drachm is equal in anodyne power to 1-8 gr. Morphine.

BROMIDIA
ECTHOL
IODIA

BATTLE & CO., CHEMISTS CORPORATION. ST. LOUIS, MO., U. S. A.

GLYCO-THYMOLINE

INDICATED
IN TREATMENT OF

Summer Complaints

ALTERATIVE
ALKALINE
ASEPTIC

Dr._____ Reports following case:

GASTRO-ENTERITIS. where there was constant vomiting. Child, twelve months old; gave one-half teaspoonful Glyco-Thymoline in hot water every hour until five doses were taken, also used Enema of Glyco-Thymoline, one tablespoonful in four ounces of water. This treatment gave prompt relief, and I believe saved the child's life.

Dr._____ Reports following case:

DYSENTERY: Patient, 16 months old, took to vomiting and running off at bowels six days before I was summoned. When I reached there, found the patient passing foul and bloody discharges, immediately put patient on Glyco-Thymoline and Liquid Bismuth, equal parts, teaspoonful every two hours; just after the second dose was given I could see a marked change. Patient improved fast, and in about three days had completely recovered.

Other similar cases treated with Glyco-Thymoline gave me equally good results.

SAMPLES ON APPLICATION

KRESS & OWEN COMPANY, 210 Fulton Street, New York

DO NOT FORGET

the importance of a remedy
that pacifies the irritable stomach
and intestines. This attribute of

GRAY'S Glycerine TONIC Comp.

makes it the most valuable
Summer tonic and reconstructive
in malnutrition, nervous exhaustion
and general debility.

THE PURDUE FREDERICK CO.,
No. 15 Murray Street, New York.

CELERINA

In Teaspoonful Doses
three or four times a day,

PRODUCES RESULTS

in the treatment of Brain Fag, Alcoholic Nerves, Senile Weakness, etc., that will induce the Physician to confirm the verdict of the Profession everywhere as to the virtues of this Celebrated Nerve Stimulant and Tonic.

RIO CHEMICAL CO.
NEW YORK.

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., JULY, 1903. No. 7

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

Subscription $1.00 per year, in advance.
Subscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
Receipts.—The receipt of all money is immediately acknowledged.
Important Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it continued expecting to receive a remittance at their earliest convenience.
We Notify all subscribers when their paid subscription expires.

EDITORIAL NOTES.

THE ETIOLOGY OF SLEEPING SICKNESS.

The British government has recently investigated the peculiar disease known as sleeping sickness, which is endemic in North Africa.

Dr. Aldo Castellani, a member of the commission sent to investigate this disease, published a report in a recent number of the *British Medical Journal* in which he claims to have discovered the infecting organism. He claims to have found the germ in the cerebro-spinal fluid and in the blood of the heart and to have grown it with absolute certainty, always in pure culture. He considers the germ as a distinct variety of the streptococcus group, but its microscopic appearance is very variable, depending on the different media on which the germ has been cultivated and on the different terms of growth.

From his experiments, Castellani has concluded that the organism must be regarded as a new variety of streptococcus.—*Abst. Ed. Med. Age.*

THE DISCOVERY OF THE GERM OF SMALLPOX.

Dr. Wm. T. Councilman, professor of bacteriology in the Harvard Medical School, in a paper read before the Harvard College Medical Society, affirmed the statement, widely heralded by the lay press, that he had discovered the germ of smallpox. The doctor stated that the research work which resulted in this discovery had been done under his supervision at the Boston Smallpox Hospital.

An anatomical study of the actual lesions of smallpox resulted in the discovery of the germ, and its definite cycle of development was also determined. In some particulars it resembles the malarial parasite.

During the earlier stages of its growth, the nuclei changed but slightly, bbut a vacuole was observed around it and growing with it, to disappear at a later stage when peculiar changes were noticed in the nuclei. Rings appeared and grew until the whole structure took on a sponge-like appearance, filling the

whole nucleus, which degenerated, setting free the body.

Ring-shaped bodies appeared, one micron in diameter, which broke up into spores. This, according to Councilman, showed, as in other protozoa, two cycles—one the intracellular and the other the intranuclear, the latter being the more complex.

It is as yet too early to decide the claims of previous investigators to priority in isolating this organism. Leob and Puffer described certain protozoa in the blood or in local lesions in 1877 to which they attributed an etiological significance. J. C. Bay a few years ago from smallpox lymph isolated an organism he believed to be the causa morbi. These researches, however, lack in definiteness and exactness those of Councilman.

The early diagnosis of smallpox would seem to be the first great advantage that will be derived from bacteriological diagnosis. The limitation of the field of infection will go along with this early diagnosis, and it may reasonably be hoped that ultimately antitoxin medication will be achieved which will outrank in excellence the advantages which have hitherto been attained only by vaccination.—*Med. Age.*

THE POWER OF ORGANIZATION.

In at least one State the full value to the public and to the medical profession of thorough and careful organization is amply demonstrated. In Kentucky every medical office in the State is filled through the medium of the State and county medical societies. No appointment to a State, county or municipal board of health, vaccinator, insurance examiner, etc., is made without consultation with and reference to the organized medical societies, and no man can receive such an appointment unless he is enrolled in the county society of the county in which he lives. Improper or unjust legislation can no longer even be introduced, for the tremendous strength of organized effort would at once strangle it. It is said, on the highest authority, that there is not a single advertising quack nor illegal practitioner in the State—a result due wholly to the complete organization of the profession and the persistent and insistent demands of the organization. A physician legally licensed to practice medicine in the State of Kentucky can have no recognized professional standing unless he be a member of his county and *ipso facto* his State society. It is quite time that this condition prevailed in every State, and we of California (and all other States—Ed.) should see to it that no further delay occurs in furthering our complete organization and securing full control of all things medical within our State.

[The above, which we clip from the *California State Journal of Medicine,* points to a condition of affairs that should exist in all parts of the Union, and will be rendered possible in North Carolina in the near future, by thorough organization of county medical societies in all the counties of the State. Go to work, brethren of North Carolina, and under the recently adopted constitution, organize for the benefit of the laity and ourselves.—Ed.]

Doctor: If you do not receive The Journal regularly, advise us of the fact *at once,* that we may look into the matter. Don't wait a year or two, thus missing all the good things we have served up, and then "cuss" us out. If you change your address, you must advise us or your copy will be mailed to your former address.

The Carolina Medical Journal

COLLABORATORS.

. T. Bahnson, M. D., Salem, N. C.
Howell Way, M. D., Waynesville, N. C.
Allison Hodges, M D., Richmond, Va.
Westry Battle, M. D , Asheville, N. C.
eo. G. Thomas, M. D., Wilmington, N. C.
P. Munroe, M. D., Davidson, N. C.
anning Simons, M. D., Charleston, S. C.
C. Baker, M. D , Sumter, S. C.
R. L. Payne, M. D., Norfolk, Va.
H. S. Lott, M D., Winston, N. C.
J. W. Long, M D., Salisbury, N. C.
H. A. Royster, M. D , Raleigh, N. C.
Albert Anderson, M. D., Wilson, N. C.
Francis L. Parker, M. D., Charleston, S. C.
Chas. W Kollock, M. D., Charleston, S. C.
Davis Furman, M. D., Greenville, S. C.
F. Julian Carroll, Summerville, S. C.
ranslation and Foreign Reviews, Richard H. Whitehead, M. D., Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.
Contributors for the Original Department of The Journal are received, with e understanding that they are contributed exclusively to this Journal.
Illustrations necessary to elucidate the text will be provided without expense to uthors when suitable ink drawings or photographs are furnished.
Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession e solicited for publication.

ORIGINAL COMMUNICATIONS.

Surgery of the Prostate Gland.

y A. J. Crowell, M. D., Charlotte, N. C., Instructor in Skin, Genito-Urinary and Rectal Diseases, North Carolina Medical College.

In deciding upon an operation for the lief of the symptoms produced by ypertrophy of the prostate gland, it is ell to bear in mind the pathological onditions accompanying these symp-oms, in order that we may the more in-lligently decide upon the most desira-e operation to perform.

In the outset, I will say that I do not elieve hypertrophy of the gland is due, s is generally supposed, to atheroma-; if so, it seems to me, it would occur more than from 25 to 35 per cent. of l males past middle life—the per cent. iven by the best authorities—but be-eve it due entirely, or nearly so, to ongestion and inflammation. I have equently seen atheromata without hy-ertrophy, and vice versa. In all or-ans, acute and sub-acute inflammation ves rise to hyperplasia, and especially this so in the prostate gland, as it is an organ abundantly supplied with blood vessels and highly cellular connective tissues. In the liver, kidney, spleen, or any of the glands of the body in which we have hypertrophy or interstitial hyperplasia, it is preceded by congestion or inflammation. Following this hyperplasia, we have atrophy of the muscle cells of the gland. As a result of this continued hyperplasia we have hypertrophy. Anything, therefore, causing chronic congestion or inflammation of the prostate, such as chronic posterior urethritis, stricture, tuberculosis, paresis, atony of the detrusor muscles, or anything preventing the complete emptying of the bladder, keeps up this hyperplasia.

The gland may be symmetrically enlarged, or we may have enlargement of any one or two of its lobes.

When the bladder and prostate are normal, the urethral orifice lies on a level with the trigone and floor of the bladder. As the prostate enlarges, the tumor lifts the urethral orifice above

the floor of the bladder, forming the so-called *bar at the neck of the bladder.*

The enlargement of the third lobe especially acts in this way. We can easily see that undue strain must be brought to bear in order to force the urine over the prostatic bar and empty the bladder completely. In the aged the trigone of the bladder becomes more and more horizontal to form the bas fond, as the French call it, and there may be some bas fond without prostatic hypertrophy, yet without urethral obstruction such a condition has not clinical significance. With hypertrophy the bas fond is never dry, and we have partial retention of urine. The constant pressure of the residual urine, the action of the bacteria upon the urea, setting free carbonate of ammonia, which irritates the bladder and prostate, produce a chronic congestion and thus keeps up interstitial hyperplasia. The bladder walls become thickened in some places and thinned in others, the mucus membrane is thrown into irregular ridges by isolated bundles of hypertrophied muscle, and between these ridges pouches or diverticula are formed. Finally the walls of the bladder give way to the increased tension and the viscus becomes greatly dilated. The ureters begin to dilate, first at their vesicle orifices, then higher and higher until the renal pelves give away before the ever increasing pressure. Desquamation of the epithelium from the bladder, ureters and kidneys, exposes the lymph and blood channels and allows the absorption of toxic substances, and when the bladder is infected the inflammation rapidly extends up the ureters into the kidneys and produces a pyelonephritis. In such a condition the whole genito-urinary tract is ripe for infection and the normal excretion of toxines is interfered with. No prostatic can have cystitis for any length of time without extension of the inflammation up the ureters into the kidneys.

The symptoms of such a condition we are all familiar with, namely: frequency of urination, more frequent by night; difficulty in starting the stream—the greater the effort the less the resultant of force and body in the stream; pain in the back, over the pubes down the thighs, in the rectum, and often in the penus just back of the maetus; failure to experience ease and relief after urination, etc. Occasionally the enlargement of the gland so distorts the urethral orifices that the sphincter cannot close and the urine is allowed to flow from the bladder as soon as it enters. This is true incontinence.

When a patient over fifty seeks relief for the above symptoms, suspicion falls at once upon the prostate. It is rare that stricture causes trouble for the first time so late in life. Such symptoms, when produced by stricture, are more marked by day. The opposite is the case when due to prostatic hypertrophy. The diagnosis can usually be made by digital exploration through the rectum. In hypertrophy, the finger will encounter a rounded, dense mass smooth and symmetrical, or variously distorted and nodulated. The median fissue may be unusually perceptible or may be obliterated entirely. Median hypertrophy alone may exist when rectal examination reveals no positive evidence of enlargement. In such cases the residual urine and the use of the cystoscope will enable you to make a diagnosis. *The amount of residual urine* measures, in a general way, the depth of the bas fond, though a strong bladder empties a fairly deep bas fond, but as it becomes atonied from over strain, it only spills off the upper layers

f the fluid. The depth of the bas fond an also be ascertained fairly well by ne use of the Thompson stone searcher. nother important diagnostic point is ne increased urethral length in hyper-ophy.

The prognosis is bad after the blad-er once becomes chronically inflamed, nd we cannot effect a cure without, in ome way, removing the obstruction. fter the kidneys become involved the atient gradually goes down and dies f urinary toxemia, without surgical in-rference.

For want of time, I shall speak only f the operative treatment, both pallia-ve and for radical cure. There is only ne condition calling for operative easures, and that is where palliative eatment has failed.

Of the palliative operative measures, nly two are allowable—supra-pubic spiration and cystotomy, supra-pubic nd perineal, and these only in emer-ency and incurable cases. Supra-pubic spiration is of great value in acute re-ntion. Some have advocated the in-rtion of a catheter through such an pening for permanent drainage, but it ems to me that supra-pubic cystot-my is the preferable, as it allows free spection of the bladder, the removal stone or growth, gives better drain-ge, and is attended with but little more nger. This plan of draining the adder was advocated some years ago Dr. Hunter McGuire, and lately acticed by my friend, Dr. H. M. Wil-r, of Charlotte, N. C., with good re-lts.

A simple cystotomy, either supra-bic or perineal, does not interfere ith the prostatic obstruction, but car-es the urine around it, and is perform-to establish permanent drainage in curable cases and for the cure of chronic cystitis. Perineal section is sometimes a source of unbearable irritation at the neck of the bladder. In every case of prostatic obstruction, the elevated orifice and enlarged lobes are what the surgeon has to deal with, and the removal of these constitute a cure. The ideal time for any operation for a radical cure is as soon as the surgeon is convinced that he cannot control the disease by palliative measures. An operation at such a time will give the lowest mortality and the highest proportion of complete cures. During the last twelve months I have done six prostatectomies and three Bottini operations without a single death. There was a virulent cystitis in one of my prostectomies and he had a urinary fistula as a result for about six months. This same patient suffers slightly with incontinence. With this exception, the results were everything that could be hoped for.

In the treatment I shall speak only of two operations for a radical cure—the Bottini, with its modifications, and prostatectomy, both supra-pubic and perineal. The Bottini operation consists in burning a groove in the prostatic obstruction with a galvano-cautery, introduced through the urethra in such a manner that the incision will not heal and thus form, as it were, a groove or channel for the drainage of the bas fond of the bladder and so interferes with the circulation in the gland as to bring about atrophy. Burning through the gland sears the lymphatic and blood vessels, and as the scar contracts, the tissue retracts and enlarges the groove. This operation can usually be done under cocaine or eucain anaesthesia, with but little discomfort to the patient. It is against all the rules of surgery to

make a hole in the wall of an infected cavity without supplying adequate drainage. The cautery so sears the blood and lymphatic vessels as to prevent a great amount of absorption, and infection may be prevented by continuous irrigation with a normal salt solution through a return flow rubber catheter. The temperature of the water can be regulated by the use of gas. The most frequent and dangerous accidents in the operation are cutting into the membranous urethra, or through the gland into the peri-rectal tissue or rectum, causing urinary infiltration. Such accidents should be met at once by perineal section.

Dr. Hugh H. Young, of Baltimore, devised the instrument I show you, which eliminates this danger to a very great extent. It has four blades of different lengths so arranged that the blades may be changed and the length used necessary to overcome the obstruction. The size of the gland (and the location of the incisions to be made) having been estimated by rectal examination and cystoscopy, the bladder and urethra are irrigated with a boracic acid solution, a half ounce of a 4 per cent. solution of cocaine is put into the bladder and allowed to remain for a minute or two, then withdrawn and the bladder washed out in order to get rid of all the cocaine; the bladder is again filled comfortably full with the boracic acid solution, the instrument is inserted into the bladder and pulled up gently against the symphosis, then rotated posteriorly over the gland, connections made and the current turned on. The alternating current is used for this purpose. From one to four incisions, as previously determined, are made at the rate of one meter per minute going in, and two coming out with the blade heated to a bright strawberry red.

The index finger of the operator should be inserted into the rectum as another precaution against burning through the gland into the rectum and membranous urethra.

Dr. Chetwood, of New York City, proposes prostatotomy or cauterization through a perineal opening, and has devised a cautery somewhat similar to the Bottani instrument for this purpose. It seems to me that this opening is absolutely superfluous and the perineal opening should never be made in this operaton save for the relief of the complications I have mentioned. If the patient is able to stand perineal cystotomy, he is usually able to stand a prostatectomy and thus get rid of the obstruction entirely. The Bottini operation is preferable only when the patient is in such a precarious condition as to make a prostatectomy a very dangerous procedure. Often a second or even a third operation with a Bottini instrument is necessary to relieve the symptoms. Only pedunculated prostatic growths should be removed through a supra-pubic opening. When the prostate is so enlarged that a cure is not effected by removing the pedunculated growth, it is better to do a perineal prostatectomy and remove the entire gland with the pedunculated lobe. The gland lies below the bladder wall, and to remove it by the supra pubic route, it is necessary to destroy a part of the base of the bladder, and the internal sphincter. If the gland protudes far into the bladder, there is also great danger of injuring the ureters. The drainage is very poor; seminal vesiculitis is a common occurrence following the operation, and sepsis is far more likely to occur.

Perineal prostatectomy is an operation founded upon sound principles. The base of the bladder and internal sphincter are not injured; free drainage is se

ured, and the capsule of the gland with ts ligamentous supports are left in situ. The chief difficulty in this operation is n reaching the prostate. Counter pres- ure, in some way, must be brought to ear in order to bring the gland down. This is done through the rectum, pres- ure through a counter opening above he pubes, and instruments inserted nto the bladder through the perineal pening.

Dr. H. H. Young, of Baltimore, has ust devised an instrument with two lades that are opened after insertion nto the bladder to pull the gland into he perineal opening, which I think is etter than pressure through the rec- um and certainly much better than hrough a supra-pubic incision.

The ideal operation would be to leave he prostatic urethra and ejaculatory ucts intact, but from the gland I have hown you, you will see that the ducts rom the seminal vessicles pass directly hrough the gland and empty into the rostatic urethra near its junction with he membranous urethra, thus render- ig such an operation impracticable, if ot impossible. The entire prostatic rethra was removed with the gland I how you and the anterior portion of he membranous urethra sutured to the adder opening with a catgut ligature. here was no leakage of urine around he tubi—thanks to the preserved ves- cle—the wound healed by first inten- on, save the space occupied by the ibe, and the entire wound healed in 18 ays and the urine voided through the atural channel.

It has been my practice to leave the nterior portion of the prostatic urethra situ, cut the ejaculatory ducts just side the prostatic capsule, remove the ntire gland save that anterior to the rethra. In this operation, the ejacu- latory ducts are interfered with as little as is possible in any operation and only the posterior portion of the prostatic urethra is removed, leaving a part of the urethra from which new epithelial cells are developed to line the newly-formed urethra.

Drugs and Whiskey Habit and Treatment.

By S. M. Crowell, M. D., Charlotte, N. C.

In presenting this paper, I shall use morphine as a basis for my remarks, the course and treatment being the same in opium and its derivatives, and approximately so for cocain, chloral, whiskey, etc. The aetology of morphinism is too well known for extensive remarks, but I will refer to some of the most important.

The medical profession is responsible for a very great amount of the habit by using morphine indiscriminately. Some physicians rely upon it hypodermically for every ache or pain a patient may have, and their druggist can almost fill their prescriptions without reading them. This, combined with various patent and proprietary preparations of the drug stores, often produces a habitue so insidiously that the patient is unaware of his danger until he is hopelessly a victim of opiumism. Unscrupulous druggists, as well as the doctors, often inaugurate the habit or disease.

But the family physician is not responsible for all the cases. Very often the physician himself will use it occasionally "for his health," as some term it, i. e., he will use it for some slight, real or imaginary pain, thus soon establishing addiction. Nerve and brain exhaustion are prominent causes, especially among more intelligent classes of people, who live excitable lives, being in a position to know of the dose and ef-

fect of morphine, voluntarily resort to it for temporary exhilaration.

The lower classes may thus resort, but they generally learn the dose and effects through their family physician. Alcoholic patients almost invariably ask for morphine which, if given, eventually changes an inebriate or dipsomaniac to a morphinist of a morphinomaniac.

Proffessors of therapeutics describe at great length the value of morphine, but say little of the possible dangers from its use. In nearly all medical colleges little or no instruction, and seldom any warning, is given the recent graduates concerning the dangers of the use of morphia and other drugs. (There should be a special lecturer to such students.)

Pathology.—Morphine produces no structural changes; they are only functional. Its action is principally upon the brain, cord, nerves, the alimentary and urinary tracts and appendages, the vasular system and skin. As a result of the perverted function, upon withdrawal of morphine, we have the following: Intestinal colic, nausea, vomiting, diarrhea; rapid, labored, irregular heart action, collapse—sometimes proving fatal—extreme prostration, cold, clammy sweats, accompanied by rigors; involuntary muscular contractions, hysteria, cramps, coryza, aching of the back, limbs and joints, persistent insomnia and possibly maniacal delirium.

I refer to the above symptoms "upon the withdrawal of the morphine" to show that the pathology is only functional and very transitory; that the system, broadly speaking, is surcharged with effete material which nature in this state is attempting to eliminate, hence the above behavior of the various organs; that the trouble is amenable to proper treatment with the probability of a permanent cure, (more so than in diseases producing structural changes), if properly treated. We will now speak of the treatment.

Treatment.—There are three principal methods used today, viz.: (a) Gradual reduction; (b) rapid reduction; (c) sudden withdrawal. To my mind, the only rational treatment is the sudden withdrawal.

Both theoretically and clinically, this is the only method. We must aid nature in this disease in its efforts to rid the system of the effete material and the remnant of the original drug stored up in the various organs of the body, just as we would in any other disease. I make some assertions contrary to the teachings of some of our most prominent authors, but I can demonstrate the statement both theoretically and clinically. The profession has practiced a gradual reduction method so long, more upon the statements of the prominent authors than upon the original study and research, that consequently the tapering off method appeals to the preconceived notions of the physician and patient, but of the great number who have tried this deceptive method, very few have succeeded.

The long drawn out gradual reduction so exhausts the nerve forces and will power of the victim, that by the time he is off the original drug he has neither physical nor psychological ability left to resist the slightest pain. In all these methods the patient is given medicine for every pain during the entire period of treatment, and is usually sent home taking the indomitable "elixir vitae," which lasts him two or three weeks. Thus the patient has been taught to take medicine for, approximately, two months by men considered his mental superiors. It is simply sub-

stituting one habit for another with eventually a return to the original drug. Were it not for the pathological condition existing, I could see some reason for using this method. But none of these authors can get rid of the pathology by their gradual reduction and substitution, and so long as we have this condition, it is no wonder we have such great problems to encounter in trying to take a patient off the original drug as told us by Erlenmeyer, Levinstein, Anders, DaCosta, Murrell and others of national repute.

With the discouraging literature of today, a people prejudiced at the results of former treatments by gradual reduction, and thus such an array of obstacles to overcome, it is not much wonder that millions of poor unfortunate men and women stroll over the country confirmed fiends, all for the lack of proper treatment, and who eventually become prey in the hands of unscrupulous sharks."

Sudden Withdrawal.—After having sincerely and conscientiously studied this subject, both theoretically and clinically for a number of years, I know that the only relief for these most helpless and wretched of earth's inhabitants is by absolute suppression of the original drugs. But some man says. "You will kill your patient by this method." answer by saying that facts do not sustain the assertion. What should be the primary object in treating any disease rationally? Of course, removal of the cause as rapidly as possible. Upon removal of morphine we are told by our most prominent authors that we will have the following train of symptoms: "Intestinal colic, nausea, vomiting, diarrhae, labored and deficient heart action and collapse." But these authors have failed to see, or at least show to their readers, that these conditions are due to a lack of elimination of the effete material stored up in the system and not to withdrawal simply. Ever since the patient began the use of the drug, both secretory and excretory organs have been retarded in their functions, hence the storing up of this effete material; and when the benumbing influence of the opiate is withdrawn, the patient's sympathetic system awakens to the fact that it is being imposed upon by this surplus load of poisonous material, and begins an active effort to eliminate it. If this elimination is performed by aid of the proper agents at the proper time, you will not have the above mentioned troubles, as told by those authors, and a number of other symptoms of nervous and mental origin will be greatly modified, if not entirely avoided.

All the authors I have read (except Dr. George E. Petty, of Memphis, Tenn., who originated and promulgated this treatment), treated these complications symptomatically, considering them due to the withdrawal of the drug, and unavoidable. This is fatally erroneous. Rational therapeutics demands a real cause and removal, and thus thwart their development. But how do this? I answer that it is done by elimination of the effete products by way of the alimentary and urinary tracts, and the skin.

The eliminative process is begun upon the patients entering the sanitorium (and they cannot be treated outside of one). The first thing to do is to give the patient a hot bath. Give some simple diuretic until the kidneys are acting sufficiently without it. Then late in the afternoon give him a good purgative, eating neither dinner nor supper. I find the prescription of Dr. Geo. E. Pettey very efficient.

It consists of calomel and pulverized extract cascara, aa, gr. X.; pulverized ipecac, gr. 11, and strychnine nitrate, from gr. 1-6 to ½ gr. M. et ft. capsules No. IV. Sig. One at 4, 6, 8 and 10. (Morphine patients can take heroic doses of strychnine.)

The patient should have his accustomed amount of the drug until bedtime—say 10o'clock—when it is stopped and the patient informed that it is his last dose. Practically, 8 hours after the last capsule, give the patient some saline cathartic and repeat every two hours until there has been a very free saline action. In the course of six to eight hours the strychnine in the capsules will have so stimulated the peristaltic action that the entire contents of the small intestines will be emptied into the colon and much of it evacuated, purely as a result of increased peristalsis; but to be sure that nothing is left in the bowels, a saline should be given. In this combination the relaxing effect of the ipecac, together with increased secretion from the mucous surfaces caused by it, is supplemented by stimulation of the eliminating glands by the mercury and cascara, together with the accelerated intestinal motion from the strychnine. This alone would fairly well empty the bowel, but there is still work for the saline cathartic. Its depleting, flooding action carries, into and out of the alimentary tract, a still further residue of effete material and of the drug against which the fight is being made. The amount of effete material thus voided, and the ease and freedom from suffering, is marvelous. During this course of evacuation a hot bath should be given. Now you have your patient clean inside and out, and you have thus avoided the distressing symptoms spoken of upon withdrawal of the drug. You have now gotten rid of the great obstruction, and have the system in a condition to work normally.

Your patient in bed, the heart has little to do but roll the blood along on a level, and if that organ is at all sound, it will do this without difficulty, notwithstanding the withdrawal of the artificial stimulation of morphine; for the unloading of the intestinal canal and relief in portal congestion lessen the strain under which the heart has been working, more than enough to compensate for the loss of the stimulus it derived from the drug, and instead of a weak and irregular heart, the character of the pulse is decidedly improved. However, should you coincidentally have a weak heart to look after, treat it rationally as in any other disease. Sparteine sulphate hypodermically in gr. 1 or 2 every 4 to 12 hours, is very efficient in giving support and uniformity to the heart's action when a cardiac support is indicated. Now we have avoided the greatest troubles which would naturally occur upon withdrawal without elimination.

Most of the other symptoms are of nervous and mental origin. It is true that the administration of the original drugs, or one of its derivatives, would allay these and delay their development for from 4 to 24 hours, but as soon as the primary effects of the morphine subside, the secondary effects predominate the system and our patient is practically in the condition we found him in our primary treatment.

So we can plainly see that the gradual reduction methods are fatally erroneous. They are not rational. Should this gradual reduction method be practiced the course of treatment would be so long and drawn out as to incapacitate our patients morally, mentally and

physically (in many cases financially), and to say the least, have the worst results.

All will agree that there are no structural changes produced by morphine, and that the hyperesthesia noted upon withdrawal of the drug is only a sequence of the anaesthesia—that it is not due to any change in the cells—consequently is self-limited.

With proper treatment these disagreeable nervous phenomena can be avoided and that particular treatment need not exceed over 24 to 48 hours after elimination has been completed. At the end of that time, the patient needs no further medication, will remain comfortable and free from all cravings for the original drug. Not only that, but the patient, contrary to former records, will have a good appetite and digestion, will sleep from 5 to 8 hours each night and his stage of convalescence, instead of being from six to twelve months (and this long convalescence often causes relapse), will be more approximately from twenty to thirty days, when he finds himself in vigorous health.

The remedy to control your patient mentally and physically during this stage of hyperaesthesia is Hydrobomate of Hyoscine. Some man is ready to say, "You are substituting one narcotic for another." That is true in name only. The therapeutic use of hyoscine for the time it is required in these cases, does not in any way perpetuate the desire or necessity for the use of morphine. It relieves pain, induces sleep and overcomes all those distressing symptoms of nervous origin that follow the withdrawal of morphine, but it evidently does so by acting upon different centres from those affected by opiates, and at the same time stimulates those centres benumbed by morphine, thus materially shortening the time during which the secondary effects of this drug would be manifested.

The administration of the hyoscine should be begun at the completion of the process of elimination referred to or as soon thereafter as abstinence symptoms manifest themselves. The dose varies greatly with different individuals, ranging from gr. 1-200 to 1-50 hypodermically, at intervals varying from 30 minutes to 6 hours. At first the smaller doses should be given and repeated at shorter intervals until sleep is induced or the patient is easy and free from all pains. After this, give such doses as your patient can tolerate. As the dosage in one case is no index to that in another, the patient cannot be left with a nurse during this period. The physician must be present constantly during the hyoscine period to observe the effects of each dose so as to determine each subsequent one and be on the alert for any trouble that might arise.

Hyoscine, in proper doses, does not affect the vital functions or leave after effects on either the mind or the body of the patient; therefore it should be given until its full physiological effects are manifested if necessary; for to allow the patient to suffer during treatment impairs his nervous system, lengthens the time during which treatment is necessary, and materially increases the danger of relapse.

The patient should be kept steadily impressed with hyoscine for 24 hours from the time abstinence symptoms begin to make their appearance; then its effects should be allowed to subside. If at the end of this time there should be a desire for morphine, or the patient be at all uncomfortable from abstinence, a full dose of hyoscine should be given and after its effects have subsided it

should be repeated, if necessary, until the patient expresses himself free from all desire for morphine, and abstinence symptoms do not return. If the course of elimination has been thorough, it will very rarely be necessary to continue hyoscine over 24 to 36 hours. At the end of this time, the patient will remain free from pain and nervousness, will sleep from 5 to 8 hours out of each 24, have no craving for morphine and in a very short period have an appetite hard to gratify.

No other treatment is needed nor should be given except in unusual cases. Your patient is now ready to get out of bed, at which time give him a hot bath, which should be kept up at least three times a week, alternating with cold douches or baths. The diet should be light and easily assimilated. Do not permit alcohol in any form at any time during treatment. It only exhilerates temporarily to allow the system to suddenly drop below normal, which condition invites a return to the original drug.

Do not give strychnine, as taught us by most authors, for it will unduly stimulate intestinal peristalsis, which prematurely expels the undigested food, depriving the system of its nourishment and setting up diarrhae, etc.

The Psychological Factors. — The physician in charge should thoroughly impress upon the patient's mind the gravity of and possibilities of a relapse. He can make impressions upon the patient's mind during the periods of hyoscine and convalescence—not available at other times—which will materially fortify against relapse.

The patient should remain in the institution for a period varying from three to six weeks, watched very closely the first few days, and as soon as possible thrown upon his own resources and educated how to live without medi cine. The fixed habit of the depend ence upon a drug is to be supplanted b a counter habit of independence. Bot time and strict discipline are essentia factors in this process. This is one o the chief reasons why no tonic or afte treatment should be given. So long a a patient takes anything (even water, i he thinks it medicine) his mind cling tenaciously to the idea that his exist ence depends upon this, and he is thu led away from rather than toward self dependence.

The Time Required.—This varie with different individuals. One perso may be more thoroughly cured and for tified against relapse in ten days tim than others in thirty days. Under thi plan, the great majority of drug an whiskey users can be cured and reclaim ed and fitted for useful positions in life Those who form the habit accidentall are the more favorable. The class wh form it voluntarily as a dissipation d not give such good results, but ar amenable to treatment and should b treated. The latter class must be re strained in the sanitorium for a longe period than the former.

The principles here given, with som variations, can be applied with equa success for all drug habits, includin cocaine, chloral, tobacco and liquor, bu will be referred to at a future day.

Please observe that the patient suf ers practically none in this course o treatment; there are no ill effects fron the course; no straight-jackets or dun geons so much dreaded by such pa tients, but on the other hand are allow ed the freedom of the institution an its grounds, and in a short while th majority can go wherever they please the physician in charge having but lit tle uneasiness about their proper con duct.

CONSTITUTION AND BY-LAWS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

(Adopted at the Fiftieth Annual Session, Hot Springs, N. C., June 2-4, 1903.)

Article I.—Title of the Society.

The name and title of this organization shall be "The Medical Society of the State of North Carolina."

Article II.—Purposes of the Society.

The purpose of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of North Carolina, and to unite with similar organizations in other States to form the American Medical Association; with a view to the extension of medical knowledge, and to the advancement of medical science; to the elevation of the standard of medical education, and to the enactment and enforcement of just medical laws; to the promotion of friendly intercourse among physicians, and to the guarding and fostering of their material interests; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine; so that the profession shall become more capable and honorable within itself, and more useful to the public in the prevention and cure of disease, and in prolonging and adding comfort to life.

Article III.—Component Societies.

Component societies shall consist of those district and county medical societies which hold charters from this State Society.

Article IV.—Composition of the Society

Section 1. This Society shall consist of Members, Delegates, Guests, Honorary Members, and Honorary Fellows.

Sec. 2. Members.—The Members of this Society shall be the members of the component county medical societies.

Sec. 3. Delegates.—Delegates shall be those members who are elected in acordance with this Constitution and By-Laws to represent their respective component county societies in the House of Delegates of this Society.

Sec. 4. Guests.—Any distinguished physician not a resident of this State may become a guest during any annual session upon invitation of the Society, or its Council, and shall be accorded the privilege of participating in all of the scientific work for that session.

Sec. 5. The Honorary Members shall consist of such regular physicians as have won distinction by their contributions to medical science; those elderly physicians who, prior to their retirement from practice, have displayed a proper interest in the welfare of this Society, or who, by their example, have reflected credit and honor upon the profession. They must be nominated by the Council and receive a two-thirds vote of the members of the House of Delegates present at the meeting at which their names are presented for election. They shall be exempt from all dues and fines, and shall be entitled to all the privileges of the Society, except the right to vote and hold office.

Sec. 6. The Honorary Fellows shall consist of such physicians as have been members of this Society contiuously for thirty years, and whose dues have been paid during that time. They shall receive a two-thirds vote of the members of the House of Delegates present at the meeting at which their names are proposed for promotion. They shall be exempt from all dues and fines, and shall be entitled to all the privileges enjoyed

by active members in good standing.

Article V.—House of Delegates.

The House of Delegates shall be the legislative and business body of the Society, and shall consist of (1) delegates elected by the component county societies, and (2) *ex officia* the officers of the Society as defined in this Constitution.

Article VI.—Sections and District Societies.

The House of Delegates may provide for a division of the scientific work of the Society into appropriate sections, and for the organization of such councilor district societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

Article VII.—Sessions and Meetings.

Article VIII.—Officers.

Article IX.—The Board of Medical Examiners and Other State Medical Officers.

Sec. 3. The elective members of the State Board of Health and of the State Board of Examiners for nurses shall also be elected by ballot on the second day of the meeting.

Article X.—Funds and Expenses.

Funds for meeting the expenses of the Society shall be arranged for by the House of Delegates by an equal per capita assessment upon each county society, to be fixed by the House of Delegates, by voluntary contribution, and from the profits of its publications. Funds may be appropriated by the House of Delegates to defray the expenses of the annual sessions, for publication, and for such other purposes as will promote the welfare of the Society and profession.

Article XI.—Referendum.

The general meeting of the Society may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, and the House of Delegates may, by a similar vote of its own members, or after a like vote of the general meeting, submit any such question to the membership of the Society for a final vote; and if the persons voting shall comprise a majority of all the members of the Society, a majority of such vote shall determine the question, and be binding upon the House of Delegates.

Article XII.—The Seal.

Article XIII.—Amendments.

BY-LAWS.

Chapter I.—Membership.

Section 1. All members of the component county societies shall be privileged to attend all meetings and take part in all of the proceedings of the annual sessions, and shall be eligible to any office within the gift of the Society.

Sec. 2. The name of a physician upon the properly certified roster of members or list of delegates, of a chartered county society which has paid its annual assessment, shall be *prima facie* evidence of his right to register at the annual session in the respective bodies of this Society. Provided, that licentiates of the State Board of Medical Examiners may, if the House of Delegates so elects, at the meeting of the Society which they receive license, be entitled to register upon payment of the annual dues for that year and be accorded all the privileges of other members for that year—the Secretary of the Society entering their names and so certifying to the Secretary of the County Society where each applicant resides, but said licentiates desiring to continue membership in this Society must affiliate with his local County Medical Society.

Sec. 3. No person who is under sentence of suspension or expulsion from any component society of this Society, or whose name has been dropped from

its roll of members, shall be entitled to any of the rights or benefits of this Society, nor shall he be permitted to take any part in any of its proceedings until such time as he has been relieved of such disability.

Sec. 4. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that session. No member or delegate shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

Chapter II.—Annual and Special Sessions of the Society.

Chapter III.—General Meetings.

Section 1. The general meetings shall include all registered members, delegates, and guests, who shall have equal rights to participate in the proceedings and discussions; and, except guests and honorary members, to vote on pending questions. Each general meeting shall be presided over by the President, or in his absence or disability, or by his request, by one of the Vice Presidents. Before it, at such time and place as may have been arranged, shall be delivered the annual address of the President, and the annual orations, and the entire time of the session, so far as may be, shall be devoted to papers and discussions relating to scientific medicine.

Sec. 2. The general meeting shall have authority to create committees or commissions for scientific investigations of special interest and importance to the profession and public, and to receive and dispose of reports of the same; but any expense in connection therewith must first be approved of by the House of Delegates.

Sec. 3. Except by special vote, the order of exercises, papers and discussions, as set forth in the official program shall be followed from day to day until it has been completed.

Sec. 4. No address or paper before the Society, except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject.

Sec. 5. All papers read before the Society shall be its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

Chapter IV.—House of Delegates.

Section 1. The House of Delegates shall meet annually at the time and place of the annual session of the Society, and shall so fix hours of meeting as not to conflict with the first general meeting of the Association, or with the meeting held for the address of the President and the annual orations, and so as to give delegates an opportunity to attend the other scientific proceedings and discussions so far as is consistent with their duties. But if the business interests of the Society and profession require, it may meet in advance, or remain in session after the final adjournment of the general meeting.

Sec. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every twenty-five members, and one for each major fraction thereof, but each county society holding a charter from this society which has made its annual report and paid its assessment as provided in this Constitution and By-

Laws, shall be entitled to one delegate.

Sec. 3. A majority of the registered delegates shall constitute a quorum, and all of the meetings of the House of Delegates shall be open to members of the Society.

Sec. 4. It shall, through its officers, advisory Council, and otherwise, give diligent attention to and foster the scientific work and spirit of the Society, and shall constantly study and strive to make each annual session a stepping-stone to future ones of higher interest.

Sec. 5. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Sec. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality, and shall continue these efforts until every physician in every county of the State who can be made reputable has been brought under medical society influence.

Sec. 7. It shall encourage post-graduate work in medical centers, as well as home study and research, and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies. (With these ends in view, five years after the adoption of these By-Laws, or after 1908, no voluntary paper shall be placed upon the annual program, or be heard in the Association, which has not first been read in the county society of which the author is a member.)

Sec. 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body, in such a manner that not more than one-half of the delegates shall be elected in any one year.

Sec. 9. It shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

Sec. 10. In sparsely settled sections, it shall have authority to organize the physicians of two or more counties into societies, to be designated by hyphenating the names of two or more counties, so as to distinguish them from district and other classes of societies, and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

Sec. 11. It may divide the counties of the State into ten councillor districts, and, when the best interest of the Society and profession will be promoted thereby, organize in each district a medical society, to meet midway between the annual sessions of this Society, and members of the chartered county societies, and none others, shall be members in such district societies. (When so organized from the presidents of such district societies shall be chosen the Vice-Presidents of this Society, and the presidents of the county societies of the district shall be the vice-presidents of such district societies.)

Sec. 12. It shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of

Delegates, and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Sec. 13. It shall approve all memorials and resolutions issued in the name of the Society before the same shall become effective.

Sec. 14. It shall present a summary of its proceedings to the last general meeting of each annual session, and shall publish the same in the transactions.

Chapter V.—Election of Officers.

Chapter VI.—Duties of Officers.

Chapter VII.—Councillor Districts.

Section 1. To facilitate the more perfect organization of the medical profession, the State of North Carolina is hereby divided by counties into ten councillor districts, as follows:

First District.—Currituck, Camden, Pasquotank, Perquimans, Gates, Chowan, Washington, Tyrrell, Dare and Hyde.

Second District.—Hertford, Martin, Pitt, Bertie, Beaufort, Lenoir, Jones, Craven, Pamlico and Carteret.

Third District.—New Hanover, Pender, Onslow, Duplin, Bladen, Sampson, Columbus and Brunswick.

Fourth District.—Northampton, Halifax, Nash, Edgecombe, Johnson, Wilson, Wayne and Greene.

Fifth District.—Cumberland, Robeson, Scotland, Richmond, Montgomery, Moore, Harnett and Chatham.

Sixth District.—Wake, Franklin, Warren, Vance, Granville, Person, Caswell, Alamance, Orange and Durham.

Seventh District.—Anson, Union, Stanly, Mecklenburg, Cabarrus, Lincoln, Gaston, Cleveland and Rutherford.

Eighth District.—Rockingham, Guilford, Randolph, Forsyth, Stokes, Surry, Yadkin, Alleghany, Wilkes and Ashe.

Ninth District.—Davidson, Davie, Rowan, Iredell, Alexander, Catawba, Caldwell, Watauga, Mitchell and Burke.

Tenth District.—Buncombe, Yancey, McDowell, Madison, Polk, Henderson, Haywood, Transylvania, Jackson, Swain, Macon, Graham, Clay and Cherokee.

Chapter VIII.—Council.

Section 1. The Council shall hold daily meetings during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Councillors. It shall meet on the last day of the annual session of the Association for reorganization and for the outlining of work for the ensuing year. At this meeting it shall elect a Chairman and Secretary, and it shall keep a permanent record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided.

Sec. 2. Each Councillor shall be organizer, peace-maker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies, and their members. He shall make an annual report of his doings, and of the condition of the profession of each county in his district to each annual session of the House of Delegates. The necessary traveling expenses incurred by such Councillor in the line of the duties herein imposed may be allowed by the House of Delegates upon a proper itemized statement, but this shall not be construed to in-

clude his expense in attending the annual session of the Society.

Sec. 3. Collectively the Council shall be the Board of Censors of the Society. It shall consider all questions involving the rights and standing of members, whether in relation to other members, to the competent societies, or to this Society. All questions of an ethical nature brought before the House of Delegates or the general meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or of a county society, upon which an appeal is taken from the decision of an individual Councillor. Its decision in all such cases shall be final.

Sec. 4. The Council shall have the right to communicate the views of the profession and of the Society in regard to health, sanitation and other important matters to the public and the lay press. Such communications shall be officially signed by the Chairman and Secretary of the Council, as such.

Chapter IX.—Committees.

Section 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Publication.

A Committee on Nominations.

A Committee on Finance.

A Committee on Obituaries.

A Committee on Arrangement, and such other committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

Chapter X.—Of the Sections and Voluntary Communications.

Chapter XI.—Assessments and Expenditures.

Section 1. An assessment of two dollars per capita on the membership of the component societies is hereby made the annual dues of this Society. The Secretary of each county society shall forward its assessment, together with its roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary of this Society on or before the first day of April in each year.

Sec. 2. Any county society which fails to pay its assessment, or make the reports required, on or before the date above stated, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the State Society or the House of Delegates, or receive the volume of Transactions, until such requirements have been met.

Sec. 3. All motions or resolutions appropriating money shall specify a definite amount, or so much thereof as may be necessary for the purpose indicated, and must be approved by the Council and House of Delegates on a call of the ayes and noes.

Chapter XII.—Rules of Conduct.

The principles set forth in the Declartaion of Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Chapter XIII.—Rules of Order.

Chapter XIV.—County Societies.

Section 1. All county societies now in affiliation with the State Society, or those that may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, upon application to the House of Delegates, receive a charter from and become a component part of this Society.

Sec. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

Sec. 3. Charters shall be issued only upon approval of the House of Delegates, and shall be signed by the President and Secretary of this Society. The House of Delegates shall have authority to revoke the charter of any component county society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Sec. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the councillor for the district, if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the council, which shall decide what action shall be taken.

Sec. 5. Each county society shall judge of the qualifications of its own members, but, as such societies are the only portals to this Society and to the American Medical Association, every reputable and legally registered physician who is practicing, or who will agree to practice, non-sectarian medicine, shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

Sec. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right of appeal to the Council and to the House of Delegates.

Sec. 7. In hearing appeals the Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual councillors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 8. When a member in good standing in a component society moves to another county in this State, his name, upon request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

Sec. 9. A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Sec. 10. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Sec. 11. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall be especially encouraged to do post-graduate and original research work, and to give the society the first benefit of such labors. Official position and other preferments shall be unstintingly given to such members.

Sec. 12. At (some meeting in advance of the annual session of this Society), each county society shall elect a delegate or delegates to represent it

in the House of Delegates of this Society in the proportion of one delegate to each twenty-five members or major fraction thereof, and the secretary of the society shall send a list of such delegates to the Secretary of this Society at least ten days before the annual sessions.

Sec. 13. The secretary of each county society shall keep a roster of its members, and a list of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information, upon blanks supplied him for the purpose, to the Secretary of this Society on or before the first day of April in each year, and at the same time that the dues accruing from the annual assessment are sent in. In keeping such roster, the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Chapter XV.—Order of Business.

Chapter XVI.—Amendments.

We wish to solicit from our readers, reports of unusual or interesting cases, too brief perhaps, for a completely written paper, but suitable for recording under "Clinical Notes." Many matters of value to the profession can thus easily be recorded which otherwise will be neglected and never become available for further reference. We wish our pages to be utilized for whatever will be of benefit to the profession.

SELECTED PAPERS.

A Short Account of the Results of Mosquito Work in Havana, Cuba.

By Colonel William Crawford Gorgas, Assistant Surgeon General in the United States Army; Late Chief Sanitary Officer of Havana.

The Army Board which met in Havana, Cuba, in the fall of 1900, for the study of yellow fever, and of which the late Major Walter Reed was president, demonstrated the mosquito theory, first made known by Dr. Carlos Finlay, and showed conclusively that the mosquito is the only means of propagating this disease.

Early in the year 1901, after the results of this investigation were published, the Sanitary Department of Havana began extensive work for the destruction of the mosquito. At that time, the prospect for yellow fever was very gloomy. It was evident that general sanitary methods would not eradicate this disease in any reasonable time. While the death rate of the city had steadily improved during 1900, yellow fever had been severe; and the same can be said of the preceding year, 1899, the first year of American occupation. After an entire year of work on the most improved sanitary lines, we had one of the worst winter epidemics that had ever occurred in Havana.

At the beginning of 1901, there were in the neighborhood of 40,000 non-immunes scattered in various parts of the city, and yellow fever infection was equally scattered. Even with the truth of the mosquito theory granted, it

eemed impossible, under any system of illing mosquitoes, to avoid leaving a ufficient number to carry on the infec- ion. No mosquito work in the Havana ouses could possibly destroy all of hese insects and a considerable num- er must always escape; and these, it as thought, would be enough to keep p the infection.

The work was planned more particu- arly with regard to yellow fever, and ne idea was, first, to prevent in every ossible way the breeding of mosqui- es; second, to prevent the Stegomyia osquities from biting yellow fever pa- ents; third, to destroy as far as pos- ble all mosquitoes that had bitten yel- w fever patients.

Careful investigation and study of e question showed that mosquitoes ere breeding in almost every house in avana. The water supplied by the ty was hard, and almost every family llected rain water for washing pur- oses. These collections were found to e the particular habitat of the Stego- yia. There being no general system sewerage, every house has a cess pool some kind. These cess pools were eat places for breeding mosquitoes.

The city is surrounded by gardens d farms which are irrigated for the rpose of raising vegetables and asses. These irrigated farms are fa- rable to the development of mosqui- es, more particularly the Anopheles, d as the city has extended, the irriga- n ditches have become uncovered wers. There are miles and miles of ch ditches, every square foot of which s breeding mosquitoes. The suburbs e overgrown with grasses and weeds all kinds.

To meet this condition of affairs, ree sets of mosquito workers were or- nized: the "Stegomyia Brigade," for rking in the built-up portions of the city; the "Anopheles Brigade," for working in the suburbs and neighboring swamps, and the "Yellow Fever Brigade," for killing mosquitoes that may have become infected.

For the purpose of systematic work, the city was divided into seven districts. To each district was assigned an inspector and an assistant. The inspector visited every day a number of houses assigned to him for inspection that day. He noted the condition of the houses with regard to places where mosquitoes could breed, and also with regard to the observance of the Municipal Ordinances on the subject.

Early in the year, the mayor issued an order requiring that everybody having water on their premises should keep it mosquito proof, and fixed a fine for the non-observance of the ordinance. The assistant accompanied the inspector with a couple of cans of oil, from which he poured about a pint into each cess pool. If vessels with standing water not protected according to law were found, it was reported to the office and the man fined; and if, on the next inspection, unprotected receptacles were again found, the water was emptied and the receptacle destroyed. This process in Havana has been successful in its results.

The first inspection showed every house, almost without exception, to have some deposit containing larvae on the premises. The last inspection of 16,338 houses, made during the month of April, showed only 187 to have larvae. Personal observation as to the number of adult mosquitoes bears this out. From many houses in Havana they have entirely disappeared, and in nearly all, are very much lessened. The officer in charge of this brigade estimates that there are only about one-tenth the number of mosquitoes in the

city now that there were at the time systematic work for their destruction was begun, and personal observation would tend to confirm this estimate.

I believe that, practically, in a city such as Havana, the mosquito is bred within the house which he troubles, and that the yellow fever mosquito—the Stegomyia—generally breeds in the rain water barrel and receptacle. If this be the case, it can be seen what a great effect the work of the Stegomyia brigade must have had. At the beginning of the work, this mosquito had 26,000 different breeding places in the 26,000 different houses of Havana; at the end of a year, in these same houses there were only 258 breeding places. This brigade has continued its work all during the year, the force varying according to the necessity of the case—the maximum employed being 36 and the minimum 22.

The Anopheles brigade was organized for the purpose of looking after the suburbs where a good deal of ditching had to be done. It was found that the larvae were breeding wherever the ground was irrigated and a hole or depression was left to retain the water. All these farms and grass lands have been ditched and drained by this brigade. All the irrigation ditches and sewers have been cleaned—both the beds and the banks—of grass and vegetation, the aim of the brigade being to drain everything possible. Such small places as could not be drained were oiled, but the use of oil to any great extent has been found impracticable in the service of this brigade. In the fields and in the grass it could not be spread around in any satisfactory manner, and in the larger pools it would be quickly blown to one side.

There are several square miles of swamp land on the east side of the city, and about a mile distant, between Havana and Guanabacoa, from which Havana is separated by an arm of the bay. No attempt was made to do anything with most of this swamp land. The mosquitoes breeding in these places seldom or never migrate to the city. As far as we can tell, they are no worse on the side of the city next which these swamps lie than in other parts.

The old quarries on the north and west sides of the city gave us considerable trouble. In the largest, a pump has been placed by the Engineer Department and the depression kept dry by pumping. In the other, we found that by digging down to the rock and scraping the earth away, the rock would absorb the water; so that in many places by digging a hole and baring the rock for a couple of yards, we have succeeded in getting rid of the water.

The Anopheles brigade was divided into sections, each section being in charge of a foreman, so that the brigade was generally at work in half a dozen different places. The whole brigade was under the charge of one chief. The force here has also varied as necessity indicated, with a maximum of 87 and a minimum of 14. The work is still being pushed. The suburbs are now being well drained, but as the rainy season comes on, the whole work of last year will have to be gone over and the grass, etc., cleaned out of the ditches.

For killing infected mosquitoes, the yellow fever brigade was organized, the plan being to kill all the infected insects in the suspected house, and on the possibility of some having escaped, to treat contiguous houses in the same manner. Fumigation with pyrethrum powder is used for this purpose. Pyrethrum is not the best mosquitocide, but it injures no fabric and leaves no odor. It intoxicates the mosquito and brings him to the ground, where he can be

swept up and burned. As a great part of the success of any scheme for yellow fever work must depend upon having the cases promptly reported, every effort is made to avoid inconvenience to the physician and people concerned. By using pyrethrum powder you can fumigate a room, kill all the mosquitoes and allow the occupant to come back within a period of two hours. No fabric is injured in the room, and no disagreeable odor is left. We use sulphur wherever there is nothing that can be injured.

When a suspect of yellow fever is reported, the squad goes at once to the house and screens the room or rooms in which the patient desires to be kept. The department has ready-made screens and the patient is generally screened within two hours after a case is reported. This is done at public expense. The other rooms in the house are carefully gone over; each room is tightly sealed by pasting paper over the cracks, just as is done in the use of formaline, and pyrethrum powder is then burned at the rate of a pound for every 1,000 cubic feet. This makes very dense fumes and will kill most of the mosquitoes; but as a great many of them only become intoxicated and would revive if given fresh air, the room is opened at the end of two hours, and the mosquitoes swept up and destroyed. Every room in the house and all the contiguous houses are gone over in the same way. On an average, 150 pounds of pyrethrum powder are used for each case.

When the case is ended, the rooms which are occupied by the patient are treated in the same way. The clothing is not disturbed, nor is any other disinfectant used. The patient is quarantined to a certain extent, only one door of entrance or exit being allowed in the screened area, and a guard is placed to see that proper precautions are observed in regard to keeping the door closed. The department allows the physician to designate four or five immunes who can visit the patient; and very little restriction is placed upon the taking out of fabrics, bedding, supplies, etc., care being taken to shake those in which mosquitoes might be conveyed.

This system has succeeded beyond our fondest expectations. We seem in every case to have destroyed practically all the infected mosquitoes, until gradually all infected mosquitoes in Havana have been killed, or died a natural death.

Since September 26th we have not had a single case of yellow fever; and I believe that, at the present time, there is not an infected mosquito left in the city, and that Havana will not have any more yellow fever until it is introduced from neighboring towns which may become infected during the summer.

During the summer of 1901, we established a system of inspection, employing men in the neighboring infected towns and on the lines of traffic coming from those towns—generally selecting natives who knew everybody in their respective towns, and who reported every non-immune coming into Havanna. No person who had been in Cuba less than five years, or who had not had yellow fever, was considered immune.

During the period of infection, 1,275 non-immunes came into the city from the two or three towns infected, and from this number we got 27 cases of fever. No case of fever was known to have escaped the inspectors. The non-immunes reported by the inspector were seen on the third and sixth days. If they were all right when seen on the second inspection at the end of the sixth

day, they were dropped. Of course the large proportion of these 1,200 non-immunes merely came into the city for a day and returned to their homes at the end of the day. No restrictions whatever were placed upon the introduction of fabrics and supplies of any kind. The results have been very satisfactory.

This is the first time, as far as my information goes, that this system of inspection has ever been used with regard to yellow fever. It is the direct outcome of the mosquito theory. We were convinced that we had nothing to fear from any belongings of the patient, and all that we cared for was to prevent a man from one of these towns being taken sick in Havana and poisoning our Stegomyia mosquitoes. The immunes, who made up as a rule 19-20 of the population, were allowed to come and go freely, and we believed we could prevent the non-immunes from doing any harm by seeing each of them on the third and sixth days. While some 27 of these non-immunes had yellow fever in the city, we seem to have gotten hold of all the mosquitoes infected by them.

We can not only point out with a considerable degree of accuracy the decrease in the ratio of deaths, but the actual number of deaths caused by mosquito borne disease can be compared before and after our mosquito work. In yellow fever it has been entirely successful. The average number of deaths from this disease for the past thirty years has been 706; for the year preceding our mosquito work, there were 310 deaths, and for the year of mosquito work, only 18. Of these 18 deaths 13 occurred before the work commenced.

While the figures for malaria are not so striking, the results seem to point just as positively toward mosquito killing as the remedial agent. For the past eleven years we had an average of 513 deaths; for the year 1900 we had 344 deaths, and during the year 1901, the first year of the mosquito work, 151 deaths. For the first four months of the present year, there have been only 26 deaths from this disease.—*Journal Association Military Surgeons.*

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

NEWER MATERIA MEDICA.

Practical Experiments in the Treatment of Anemic Conditions.—(By Fritz Euler-Rolle, M. D., of Vienna.)—In the following I desire to describe in some detail the action of an iron preparation which, owing to its great advantages, deserves a permanent place in our materia medica. The preparation referred to is Pepto-Mangan (Gude), which unites in a fortunate manner those qualities which we have a right to demand of a ferruginous remedy. In the first place it contains besides iron a second constituent of importance in the formation of blood, namely, manganese; and, secondly, both of these are present in a neutral solution, which is the more to be valued since because of this fact it disturbs neither the gastric nor the intestinal

functions. For this reason we are enabled to submit every case of chlorosis at once to ferruginous treatment, irrespective of the condition of the gastro-intestinal tract. Other authors have called attention to this advantage. Heitzmann emphasizes particularly how well the preparation is tolerated, and that, unlike other chalybeates, it does not have an injurious influence upon the digestive organs, but even increases the appetite.

Ripperger considers the preparation as a very useful and easily assimilated remedy, free from any disturbing effect upon the digestive tract.

In my own experiments with Pepto-Mangan (Gude) I have exceeded the limits of its indications hitherto maintained, inasmuch as I became convinced that this preparation should not be confined especially to cases of chlorosis and anemia, but would effect improvement in other diseases attended with weakness and exhaustion, or at least maintain the nutrition of the patient, since the peptone which it contains acts as a nutrient and deserves consideration. On this point of view I based the first series of experiments, consisting of 11 cases, in which the general result was very satisfactory. These comprise one case of tabes with gastric crisis, 1 case of obstinate vomiting in pregnancy, 1 case of esophageal cancer with severe stenosis, 4 cases of diabetes mellitus of slight degree, 3 cases of the uric acid diathesis with arthritis, and, finally, 1 case of leukemia. The second series of observations related especially to cases of chlorosis and secondary anemia, the latter comprising 14 cases, so that altogether 25 experiments were made.

In the following I have made a selection from this number, and almost every case illustrates the remarkable value of the preparation.

J. P., aged 33 years, butcher's assistant, consulted me June 2, complaining of constant vomiting and very violent colicky pains which occurred soon after taking food of any kind. The vomiting matter contained almost always the entire food ingested, and on one occasion a moderate quantity of black coagulated blood. Pressure upon the stomach was quite painful. The diagnosis of ulcer of the stomach, to which the symptoms pointed, was discarded after a more thorough examination revealed symptoms characteristic of a tabes dorsalis. The patient within a short time had become markedly emaciated, having lost eight kilos in weight. He had acquired syphilis 12 years previously during his military service. The attacks affecting the stomach therefore proved to be gastric crisis. After they had diminished in frequency and intensity under the use of hot poultices and strict diet, Pepto-Mangan (Gude) was prescribed at the beginning of July. At first three tablespoonfuls were given daily, added to milk, and later, when it was found that the preparation was well tolerated, it was increased to six tablespoonfuls. After the sensitiveness of the stomach had gradually subsided the patient could be discharged from treatment in the middle of August, having regained his weight with the exception of a trifle, while the crisis had completely ceased.

In a case of uncontrollable vomiting in an anemic woman, 24 years old, during her first pregnancy, pepto-mangan was administered in the quantity of three tablespoonfuls daily, to which were added small amounts of cold milk. Hot applications with the thermophor were also employed. After less than four weeks the patient was discharged from treatment, improved, without any loss of weight.

Another observation relates to a case of inoperable cancer of the esophagus. The patient, 62 years old, had suffered since about one and one-half years from the neoplasm, but up to six weeks ago had been able to take, without any trouble, soft foods. Since that time, however, he had been able to swallow only small amounts of fluid. One morning, as usual, he had introduced a stomach tube himself, but during its withdrawal experienced violent pain. Since then he had constantly expectorated blood. Under the use of morphine injections and the application of the ice-bag to the thorax, rest upon the back, and complete abstinence from any food, his condition improved, and on the following day a nutritive enema, consisting of milk, eggs, and red wine, with the addition of four teaspoonfuls of Pepto-Mangan (Gude) and 20 drops of tincture of opium, was administered. On the next day the same was done. After the hemorrhage had permanently ceased, nutrition by enema was supplemented by administration per os of milk and pepto-mangan in small amounts, which were well tolerated. In this way it was found possible to keep up the nutrition for a considerable time in a comparatively satisfactory manner.

I am able also to report two cases of diseases of the metabolism, namely, one of diabetes mellitus of moderate degree and one of the uric acid diathesis. The subject of the former was a man 46 years old, who since two and one-half years had constantly excreted a variable quantity of sugar in the urine. He stated that while the amount at first was only 0.7 per cent., it had increased and finally reached 3.21 per cent. After being placed on exclusive animal diet there was always a gradual subsidence of the glycosuria, the sugar disappearing completely from the urine after about 14 days. In the course of time, however, he acquired an unconquerable repugnance toward any form of animal food, and the supply of albumen could only be augmented by the addition of nutritive preparations to milk, of which he took about a quart daily. Gude's Pepto-Mangan was administered regularly in quantities up to 6 tablespoonfuls daily, chiefly to relieve the marked anemia present, which it did excellently. Inasmuch as this preparation supplies not only iron and maganese, but also peptones to the organism, the patient could be maintained in a vigorous condition during six weeks.

Another patient, 58 years old, who had suffered since four years with arthritis urica, had passed three months previously through an acute gouty attack, which yielded to iodide of potassium, the former attacks having been relieved by the salicylates. The diet, which had always been somewhat abundant, was thoroughly regulated, and for a long time the patient took meat only at his midday meals, with the proportionate addition of green vegetables and some fruit, while his breakfast consisted of coffee with milk or thin cocoa, with two tablesponfuls of pepto-mangan, and a roll, and his supper of butter, eggs, etc., and two tablespoonfuls of pepto-mangan. No recurrence of the acute gouty attack has taken place after a lapse of five months, and subjectively also the patient feels well under this regimen.

Another observation relates to a peasant girl, 24 years old, with leukemia. Examination of the blood showed that the number of erythrocytes had fallen to 1,600,000 to the cubic millimetre, while the number of leucocytes amounted to almost 90,000; poikiloscytosis was also

present. Among the leucocytes there were found about 6 per cent. of eosinophile cells and numerous lymphocytes. The percentage of hemoglobin according to Fleischl's method was about 20 per cent. The spleen was much enlarged, its lower margin being palpable three fingers' width below the navel. Besides the medicinal treatment with quinine and arsenic, Pepto-Mangan (Gude), at first three tablespoonfuls, later six tablespoonfuls, was added to the milk. The patient also received a mixed diet. At the end of two months she had gained 2½ kilos in weight. If we consider that in severe leukemias the excretion of nitrogen is always increased, and that this patient before the administration of the iron preparation, in spite of an abundance of nourishment, constantly lost in weight, as shown by observations made every five days, we are forced to the conclusion that the improvement in her nutrition must be ascribed in great part to the abundant ingestion of easily absorbable albumen and the hematogenic power of the preparation administered.

Although from the cases cited above we are able to form a decision as to the action of this remedy, it may be further added that it fulfills its purpose in the majority of instances; for, aside from a marked case of phthisis with intestinal ulcers and amyloid changes in the internal organs, in which the profuse diarrhœa was increased by the administration of the iron preparation, which therefore had to soon be discontinued, and aside from a case of severe diabetes, a considerable improvement in the general health of the patient could always be demonstrated clinically by determinations of the bodily weight, by the condition of the gastro-intestinal tract, and by microscopical examinations of the blood. The increase of the diarrhœa in the above cases is attributable, in my opinion, perhaps to the too large quantity of the pepto-mangan administered. It is well known that all peptones and albumoses stimulate more or less the mucous membrane of the intestine, and therefore may give rise to frequent fluid evacuations. This is best avoided by keeping the daily and single doses within certain limits and not increasing them too rapidly. On the other hand, this property of the preparation can be utilized therapeutically, especially in cases attended with habitual and chronic constipation, particularly in chlorotic girls, in which the iron administered enhances the existing sluggishness of the bowels, as well as in neurasthenia and similar conditions.

Inasmuch as in pepto-mangan the nucleins are comparatively absent, it acts as a valuable auxiliary in the treatment of the uric acid diathesis, since, according to Kossel, all nucleins have the effect of increasing the formation of uric acid. Moreover, it is entirely free from extractive matters. While the latter ordinarily constitute a very agreeable addition to the diet, and their increased ingestion is desirable in some cases, on the other hand their effect is the more injurious in various diseases, especially those of the kidneys.

Up to 1870 it was the custom in all acute maladies, and especially those attended with a typical rise of the bodily temperature, to advise against the ingestion of albumen, because to it was attributed the increase of the fever. This idea had its origin in the experience that the various acute infectious diseases, as in typhoid, peritonitis, and acute exanthemata, and even during the period of convalescence, the administration of albuminous food, of course in

the unsuitable form customary at that time, was followed by a sudden exacerbation of the temperature. This, according to our present knowledge, was certainly not due to the albuminous ele- adapted to the condition of the digestive ments of the diet, but only to their form and character, which were not well organs in these maladies. On the other hand, Pepto-Mangan (Gude) can be resorted to safely in all these cases without any fear of inducing complications in the course of the disease. In my opinion, it has, in fact, certain advantages over the customary alimentation with milk, since the latter, owing to coagulation in the stomach, assumes a firmer consistence, while the pepto-mangan is undoubtedly absorbed to a great extent in the stomach.

At any rate, the preparation, owing to its abundance of peptone, has calorically a great nutritive value, since, according to the investigations of various authors (Zuntz, Ewald, Pollitzer, Adamkeiwicz), the albumoses and peptones are capable of replacing albumen completely, and when given in appropriate doses are able to restrict, or even to arrest, the loss of fats, just like any other albumen. This is the more readily intelligible since the greater part of albuminous foods is absorbed in the form of albumoses and peptones, and reconverted into albumen by the intestinal mucous membrane and within the tissues.

If up to now I have described only cases which are intended to illustrate the utility of the preparation even in desperate conditions, I have done so in order to point out that in cases apparently beyond medical aid, and in others in which we despair of success, we should not stand by inactive. Thus, for example, in the above case of diabetes it was a matter of great importance that we were able by means of pepto-mangan to raise his nutrition, which, in consequence of his repugnance toward a meat diet, had become greatly reduced and was accompanied by pronounced anemia, to such a level that for a comparatively long period of time the patient was able to get along without any large consumption of meats.

What further incited me to report these cases was that the experiments so far made with pepto-mangan have been restricted, for the most part, to the field of iron preparations, of which an article by Dr. Doen affords us a very comprehensive review. This author remarks very justly that most of the ferruginous preparations hitherto manufactured consists of albuminous material held in solution by an excessive amount of caustic soda, thus neutralizing the gastric juice, while, on the other hand, through their decomposition the irritating chloride of iron is produced; or they represent peptone combinations containing an excessive amount of mineral acids, and therefore are precipitated by the alkaline intestinal secretion and rendered less assimilable.

Pepto-mangan does not share in these disadvantages, and moreover, owing to the presence of maganese, that excellent carrier of oxygen, is of the greatest value, especially in chlorosis, anemia, and allied conditions.

I take the liberty of reporting only two cases from the remaining 14, both relating to chlorosis characterized by severe symptoms, and illustrating very graphically the prompt action of this chalybeate.

The first case was that of a girl, 18 years old, who presented a well-developed type of marked chlorosis. There

was marked anemia of the general integument; the mucous membranes were very pale, and she suffered since the last fourteen days with persistent headache and buzzing in the head. This was accompanied by palpitation and a feeling of weakness, as well as pronounced edema of the lower extremities up to the middle of the leg. Her menstruation was very irregular and profuse. Examination of the blood showed a much reduced color index, 20 according to Fleischl's method. The number of red blood cells was reduced to 3,100,000, the white not being materially increased. Although the patient had taken the greatest variety of iron preparations, they were not well tolerated. I therefore decided to administer Pepto-Mangan (Gude), enjoining at the same time rest in bed, which seemed indicated, if for no other reason than that of the condition of the heart and the attacks of weakness. The patient received at first two tablespoonfuls and after a few days three tablespoonfuls of the pepto-mangan, and this amount in the third week was increased to five tablespoonfuls daily. The effect was truly surprising; without the least disturbance of the gastro-intestinal tract, considerable improvement of her entire condition had occurred at the end of four weeks, so that she was able to be up and about. She had a good appetite and menstruation was regular for the first time in months, while the cardiac palpitation, headache, and buzzing in the head, as well as the edema, had vanished. Examination of the blood showed 3,980,000 red blood corpuscles and a hemoglobin percentage of 50 (Fleischl). After another four weeks the patient was completely restored to health, with a hemoglobin percentage of 70 and an increase in the number of red blood cells to 4,200,000.

The second case of chlorosis related to a girl, 21 years old, who since the beginning of the disease had complained of marked disturbance of the digestive organs. She frequently vomited and suffered with gastric pains and an increasing feeling of aversion toward all food. In this case also an examination showed the presence of severe chlorosis, complicated with anemia and emaciation due to the much-reduced ingestion of food. This case was the more welcome to me because it afforded a crucial test as to whether pepto-mangan can really be taken without any disturbance of the gastro-intestinal tract. I administered at first very cautiously, only three teaspoonfuls of the preparation, and, as this was completely retained and seemed to cause no disturbance of any kind, I increased the quantity on the third day to two tablespoonfuls, and during the following days to four tablespoonfuls, which dose was not exceeded. The preparation, therefore, completely fulfilled my expectations. In the course of three weeks the gastric and intestinal troubles had disappeared, the patient regained her appetite and was able to take an abundance of food, so that her weight had soon reached its normal level, while simultaneously with the disappearance of the chlorotic condition a considerable improvement in the state of the blood ensued.

In conclusion I would only add that during the administration of the pepto-mangan no unpleasant by-effects have been observed and that the preparation has always been willingly taken.

Coco Increases Assimilation.—The efficacy of Vin Mariani as a tonic does

not lay in its property as a nervous stimulant, but in the more effectual and lasting property arising from improved assimilation, thus provoking continued support. This is scientifically explained by the physiological action of Coca upon the several systems of the human organism. Aside from any cerbral action Coco is a depurative of the blood, freeing the stream from a burden of waste products, which, manufactured through ordinary wear and tear in the vain struggle for existence, may, because of some physical imperfection, have been improperly eliminated. The presence of these waste products not only interfere with assimilation, but precede a long train of following troubles such as rheumatism, gout, diabetes and liver and kidney disease. But man must work, while habit or environment is not always hygenically conducive to normal repair, yet knowing this, perhaps, he still must labor on under unfavorable conditions. It is in such cases that Coca acts as a remedy veritably magical. Consider the poor Indian, who toils, amidst the greatest hardships, over the bleak and rugged Andes at an altitude where mere existence is a serious problem! He is supported through these struggles by Coca alone. Similar systematic results to those that beset him are met with in the midst of the most advanced civilization, and many be offset in a similar way. Scientific cleverness has adapted the primitive methods to modern conveniences. Vin Mariani presents all the efficacious possibilities of Coca in a form that is at once convenient, agreeable and positive.

Impaired Digestion of Infants, Particularly Bottle-Fed Babies.—(By F. H. Munroe, M. D., Newark, N. J.)—The first few months of the baby's existence are fraught with much anxiety to both mother and physician.

The stomach, just beginning the functions for which it was created, is somewhat loth to accept the changed conditions; it frequently rebels at having to perform the act of digestion as it should, and rejects the food committed to its care.

Sometimes the cause of this rejection may be over-feeding, but much more frequently it is due to hyperacidity caused by fermentative changes in the food itself.

Particularly is this true of bottle-fed babies, and in the trials of food necessary to discover the one that best agrees with the baby, much time is lost and much worry is caused.

The very nature of artificially prepared foods predisposes to their rapid fermentation, and the progress of digestion is begun before the food leaves the laboratory.

Added to this condition is that of slight uncleanliness, which frequently exists in spite of the persistent use of boiling water in the bottle, tube and nipple. Even a strong solution of borax or bi-carbonate of soda is not sufficient to thoroughly remove the particles of food, and prevent the excessive fermentation and its sequelae, namely, colic vomiting and diarrhoea.

The only rational method of treating this dreaded condition is to assist nature in her efforts to establish a normal process of digestion, and overcome the too active fermentation taking place in the stomach and intestines. Investigation has shown that these abnormal conditions may be readily overcome, and normal conditions restored by the internal administration of Glyco-Thymoline in small doses, and its further use in cleansing the tube, bottle and nipple.

The Sumbul Series

No. 2

In our advertisement of Series No. 1 we gave some valuable formulas and expatiated on our expert experience in preparing Sumbul, at the same time dilated upon the therapeutic value of the drug.

'e reiterate there are none so good as

WM. R. WARNER & CO.'S.

The following recipes may interest our readers

TABLETS ONO-NERVINE

WARNER

t. Sumbul,	1-2 gr.
osphorus,	1-100 gr.
t. Damiana,	1 gr.
rri Carb.	1 gr.
afetida,	1-2 gr.
t. Nux Vom.	1-10 gr.

In each tablet.

A VALUABLE TONIC

TONO SUMBUL CORDIAL

THE IDEAL TONIC

12 oz. bottles only.

—FOR—

PHYSICIANS PRESCRIPTIONS

PIL. SEDATIVE

WARNER

℞

Ext. Sumbul,	1-2 gr.
Ext. Valerian,	1-2 gr.
Ext. Henbane,	1-2 gr.
Ext. Cannab. Ind.	1-10 gr.

In each pill.

A VALUABLE SEDATIVE

)ecify Warner & Co. when you prescribe and avoid disappointments

WM. R. WARNER & CO. MANUFACTURING PHARMACEUTISTS

HILADELPHIA NEW YORK CHICAGO NEW ORLEANS

Ten drops of Glyco-Thymoline added to each two ounces of feeding will usualy be sufficient to correct hyperacidity and prevent diarrhoea, but larger dosage are necessary in cases where diarrhoea has already set in.

That Glyco-Thymoline does all that is claimed for it in this class of cases was conclusively proven to me last summer by the results I obtained in three cases of fermentative indigestion, which for some time gave me considerable trouble. Microscopical examination of the stools showed the presence of a fungus of the yeast plant variety.

The colon was flushed twice daily with Glyco-Thymoline solution, two tablespoonfuls to a pint of water, by high rectal tube, and a teaspoonful of Glyco-Tymoline by mouth every four to six hours. This was followed by marked improvement in every way.

I have given Glyco-Thymoline internally and by rectum in other cases, but the above are good samples of what Kress & Owen's preparation will do. It has become one of my "sheet anchors" in the treatment of intestinal disorders, both in babies and older people.

R. For Lucorrehoea:

Leukretol	ʒi
Hot Water	oii

Sig.: Use as vaginal irrigation two or three times daily.

Severe Reflx Pain.—J. H. Tilden, M. D., of Denver, in the June number of the *Chicago Medical Times,* in an article advocating the use of tampons in gynaecological practice, reports, among others, a case which was characterized by severe reflex symptoms and which had not yielded to the treatment accorded by two other practitioners. Dr. Tilden's procedure was, the introduction of a glycerine tampon and the administration of antikamnia in ten grain doses (two five-grain tablets) to relieve the pain. The tampon was removed each night at bedtime and followed with hot water injections. The patient on being discharged, remarked that since following this treatment she could run the sewing machine without the usual pain and tired feeling.

Sanmetto for Enlarged Prostate in the Aged and Enuresis Nocturna in Children.—My experience with Sanmetto has been most gratifying. I consider it the greatest remedy I ever used in cases of aged men with enlarged prostate. I am now using it in two cases of nocturnal incontinence. Both children are improving rapidly.

W. H. Lyle, M. D.

Olpe, Kans.

Chaparro Amargoso—A New Dermatological Remedy.—In the Medical Council, June, 1903. Heartsill reports results with the new dermatological remedy, Chaparrin. His experience with the remedy was uniformly satisfactory in eczema, tinea and scabies. Among the cases reported the following is of special interest:

"Case 1. Hon. A. J. B., male, aged 50, occupation lawyer, district judge. Eczema, erythematous variety, thirty years' standing. Had been relieved from duty in cavalry service C. S. Army on account of eczema affecting scrotum, anus and feet. Nails on toes were one-half inch thick. Came for treatment 14 years ago. Used chaparrin full strength once daily for the first week, then every other day for three weeks, at the end of which time the patient was discharged cured. Forbade the use of soap and

North Carolina Medical College

DAVIDSON, N. C.

SITUATION—Heathful, moral, conducive of study.

STANDARD—Equal to any College of the South.

RECORD—Excellent as shown by the high standing of our graduates.

EQUIPMENT—Seven Laboratories, Three Hospitals, Two General Dispensaries.

CLINICAL INSTRUCTION---On the modern plan.

CHARLOTTE CLINIC---A superbundance of material.

FACULTY---Strengthened by ten of Charlotte's leading Physicians and Specialists.

INSTRUCTION---By "quiz method" and laboratory work.

PHENOMENAL GROWTH---From 11 to 67 students in 10 years. From 4 to 17 Professors in 10 years.

For further information and Catalogue

Address

J. P. MUNROE, M. D.,

DAVIDSON, N. C.

water during treatment. I saw the patient a few weeks ago and the cure is permanent; no return whatever."

Chaparrin is a product of the Texas shrub, Chaparro Amargoso, and eventuates from a long series of experiments. The active principles of Chaparro Amargoso are combined with Salicylic Acid, Phenol and Camphor. It has proven to be a remarkable remedy in all skin diseases. Literature on Chaparrin is furnished by the Matthewson Laboratory, Marshall, Texas.

DID YOU EVER ENJOY A MEAL IN BED?

Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
300 Rose Bldg., CLEVELAND, O

Keeley Cure

For Drunkenness and Drug Using.

Please write us. Correspondence confidential.

THE KEELEY INSTITUTE, Dept. B., Greensboro, N C

Our Illustrated Handbook Sent Free On Request.

NEURILLA

SOOTHES, CALMS AND REGULATES THE NERVES.

INDISPENSABLE FOR NERVOUSNESS.

No bad effects follow its use.

DAD CHEMICAL CO., NEW YORK.

Chemical food is a mixture of phosphoric acid and phosphates, the value of which physicians seem to have lost sight of to some extent in the past few years. The Robinson-Pettet Co., to whose advertisement (on page 355) we refer our readers, have placed upon the market a much improved form of this compound, "Robinson's Phosphoric Elixir." Its superiority consists in its uniform composition and high degree of palatability.

Convulsions may frequently be cut short, like magic, by teaspoonful doses of Celerina repeated at short intervals. The nausea as an after-effect of chloroform, or other narcosis, may generally be controlled in the same manner.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

AMONG THE MAGAZINES.

Resume.—EVERYBODY'S MAGAZINE is making a reputation for striking covers. The birch-bark cover of the June number is followed by a brilliant 4th of July cover of the July number. The bunch of firecrackers looks natural enough to stir the warm blood of a patriot. The magazine itself is an exceptional number. Mr. Ridgway and Mr. Thayer are justifying the wisdom of their former employers, who paid them the highest salaries in their respective lines. They are surely making a splendid success of

Everybody's Magazine. They are not imitating, they are not adapting, they are not copying; on the contrary, they are hewing out their own lines in so independent and vigorous a fashion that it is not beyond the point to prophesy for them a most promising future. You will find several features in *Everybody's Magazine* which cannot be had in any other magazine. "Significant Autobiographies" is one of the features. The July number gives the autobiography of a successful lawyer. The story is splendidly told, several dramatic incidents are narrated. Every lawyer will wish to read it, and everybody else, because everybody is interested in knowing how great successes are achieved. Another feature is "The Unemployed Rich," treating, in the July number, of a wedding, describing the feelings of a rich girl who marries for position, and the impression the wedding makes on her cousin who is not rich. The picture is not overdrawn, the writer is not cynical, the story is straightforward and wholesome. "Intimate Portraits" is another feature. The publishers promise to give portraits of people who are doing things, whether they are getting rich at it or not.

July Fiction.—The July number of *Everybody's Magizine* is specially strong in fiction. A new serial is begun in that number by Gelett Burgess and Will Irwin, called "The Reign of Queen Isyl," a gay, vigorous, human tale of modern California and a fiesta queen who vanished on the eve of her coronation. The fantastic humor of Gelett Burgess and the sturdy realism of Will Irwin have combined to make a charming story. "The Marriage of Martin," by Frederick Walworth, is a lively tale

DOCTOR:

HAVE YOU USED LEU-KRE-TOL

THE NEW ANTISEPTIC

COMPOUND?

The Formula combines, under heavy trituration, the following drugs: Acinum Boracicum, Acidum Carbolicum, Menthol, Hydrastine Sulphas, Sodii Boras, Alumen, and Glycerinum. The powder will readily go into solution and is not only an Ethical, Scientific Pharmaceutical product, but also a pleasant, nor irritating and efficient preparation.

PHYSIOLOGICAL ACTION:

Antiseptic, Disenfectant, Deodorizer, Astringent and Antiphlogistic, reducing inflammatory exudates by its exosmotic action.

THERAPEUTICAL INDICATIONS:

Catarrhal conditions of nose and throat, tonsillitis, pharyngitis, hoarseness, etc. Usual ℞ being (Leu-Kretol ʒi Glycerine ʒiv Aquæ Q. S. ℥vi) either as Douche or Spray.

VAGINAL DOUCHE:

Especially valuable in Lescorrhoea, Vaginitis, Urethritis, Gonorrhœa, Pruritus, Septic conditions of Puerperal State, (being a superior remedy to Creolina, etc..) and in all offensive Uterine and Vaginal discharges. (ʒi to 1 Qt. of hot water.) Samples and literature on request.

Don't forget the name LEU-KRE-TOL.

Manufactured by the

LEU-KRE-TOL CHEMICAL CO.

Baltimore, Md.

Branch

Winston-Satem, N. C.

of Irish twins who loved the same girl. "The Atavism of John Tom Little Bear," by O. Henry, is a humorous story of an Indian, who, after receiving a college education, becomes Indian again for a few hours, much to the reader's edification and the Indian's credit. "The Poet and the Hall Bedroom" is a dainty story by Emile Watson, full of sentiment. "The Wooing of Ah-Te" concludes in the July number. It is the strongest instalment of a strong story. The Indian snake dance is given with such realism as to suggest that the author must have been an eye witness. "The Little Stories of Real Life," by Juliet Wilbor Tompkins, Richard Barker Shelton, Louis A. Weadock and Sidney Porter are an improvement over any previous series of Little Stories. "With The Procession" gives the usual monthly review of the important events that are making history, besides covering the special departments of Music, Art, and Books. "With the Publishers" is the monthly chat which a great many readers find especially interesting, as it gives much inside information of the publishers' plans and the progress they are making. Altogether, there are 140 pages in this July number, profusely illustrated, splendidly balanced, carefully edited. You cannot afford not to get the July number.

MEDICAL NEWS AND ITEMS.

Smallpox is prevalent in the island of Trinidad.

Dr. J. W. Long, of Salisbury, has moved to Greensboro, N. C.

Wisconsin has set aside $50,000 to be utilized for the prevention of bubonic plague.

The Canadian House of Commons has declared for the prohibition of the importation, manufacture and sale of cigarettes in the Dominion of Canada.

The *Baltimore Underwriter* says: "Christian Scientists can't be Foresters, and all life insurance companies might as well shut the door in the faces of such cranks."

Saxony has 945 charlatans to 1,957 regular physicians. Including osteopaths, Christian Scientists, magnetic healers, and the regular medical fakes, some sections of the United States are good seconds.

Monsoon stations are to be established in India for the purpose of taking observations by means of kites and kite balloons. The first station will be in the Himalayas at Simla, 7,000 feet above the level of the sea.

Summary Measures to Protect Health.—Mayor Harrison, of Chicago, has ordered that all unsanitary buildings that cannot be repaired by their owners, shall be torn down, if condemned by the board of health.

Dr. Friedreich Mueller, former assistant to Dr. Lorenz, has returned to Chicago, and announces that he will locate permanently here and practice his specialty of orthopedic surgery.—*Journal of the American Medical Association.*

A New Medical Journal.—The *Louisville Journal of Medicine and Surgery* has been incorporated with $2,000 capital stock. The incorporators are Dr H. H. Grant, Dr. J. M. Mathews, Dr A. M. Cartledge, and Dr. Henry E Tuley.

PROTAN

MEETS EVERY
REQUIREMENT IN

Typhoid Fever

It heals ulcerations in the ileum, prevents the development of bacteria and toxins, and checks hemorrhage in typhoid fever, because it is

ANTISEPTIC AND ASTRINGENT TO THE ENTIRE INTESTINAL TRACT

FURNISHED IN POWDER OR TABLETS
Interesting Literature and Samples mailed upon request

Introduced by
H. K. MULFORD COMPANY
Chemists
Philadelphia New York Chicago

A COMBINATION OF FORCE,

ELIXIR MALTOPEPSINE

(TILDEN'S) WITH

CLYCEROPHOSPHATES

RECONSTRUCTIVE-DIGESTIVE

A TISSUE REMEDY furnishing the pabulum necessary to all cell life. Prepared especially for Physicians' Prescriptions. Samples and literature on application. Manufactured only at the Laboratory of

THE TILDEN COMPANY,

PHARMACEUTICAL CHEMISTS,

NEW LEBANON, N. Y. ST. LOUIS, MO.

COLLEGE OF PHYSICIANS AND SURGEONS OF BALTIMORE, MD.

Thirty-Second Annual Session will begin October 1st, 1903. New building, modern equipment, unsurpassed laboratories, large and independent Lying-in Asylum for practical obstetrics, and many hospitals for clinical work, present to the medical student every advantage. For catalogue and other information, apply to

THOMAS OPIE, M. D., Dean, Cor. Calvert and Saratoga Sts., Baltimore, Md

Announcement has been made of the election of Dr. Robert Koch as the foreign associate of the Paris Academy of Sciences, which place was formerly held by Prof. Rudolf Virchow. Dr. S. P. Langley was mentioned for the place, and received six votes.

Milwaukee Emergency Hospital Fees.—An ordinance is being prepared to enforce payment of fees in cases where patients are taken to the hospital from shops covered by employes' liability insurance. The fees would probably amount to $2,000 a year.

The Samuel D. Gross prize of $1,200 will be awarded January 1, 1904. This prize is awarded every five years to the writer of the best original essay on surgical pathology or surgical practice founded upon original investigation. Candidates must be American citizens.

The hottest region on the earth is on the southwestern coast of Persia, where Persia borders on the gulf of the same name. For forty consecutive days in July and August the thermometer does not fall lower than 100 degrees, night or day, and often mounts as high as 120 degrees.

The tests made by Dr. Hibbert Winslow Hills, bacteriologist of the Boston Board of Health, on the value of formalin injections to arrest bacterial activity in the body, as advocated by Dr. Barrows, indicates that solutions to be efficient must be sufficiently strong to d

stroy tissues, and hence are impracticable.—*Journal of the American Medical Association.*

A young woman of Scipio, Ind., recently died of smallpox, and an investigation showed that two weeks before she was taken ill she opened an old trunk in an attic, which contained clothing that had been worn by her father just previous to his death from smallpox, just thirty-nine years ago. The health officers believe that she contracted the disease from handling the infected clothing.

Graduates of an institution of osteopathy, requiring four courses of five months each, are now eligible to practice osteopathic medicine (?) and osteopathic surgery (?) in New Mexico, but are precluded from using drugs or performing major surgical operations under penalty of committing a misdemeanor. This is the outcome of a five year conflict between the New Mexico Medical Society and the osteopaths.—*New York Medical Journal.*

The Antiquity of Castor Oil.—A French savant, Professor Larit, alludes to the frequency with which seeds of the castor oil plant are found in Egyptian tombs. Some of these recently discovered at Thebes could not be less than 3,000 years old, and were perfectly preserved, the oil which they contained being simply rancid. Larit has translated an ancient papyrus which goes to show that the uses to which the ancient Egyptians put the oil were much the same as nowadays.

Human Rays.—It is announced by Prof. Arthur W. Goodspeed, of the University of Pennsylvania, that he has been experimenting with rays emanating from the human body. Although photographs were made by the aid of Crookes tubes, it is asserted that the

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:

8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

JOHN R. IRWIN, M. D.,

CHARLOTTE, N. C.

Special Attention Given Surgery and Gynecology.

tubes were not the actual means of producing the photograph, but that they acted simply as intensifiers of the rays. Prof. Goodspeed is said to have ascertained that the rays from the human body pass with difficulty through glass and with ease through aluminum.

At a recent meeting of the National Association for the Prevention of Tuberculosis in London, it was announced that Messrs. Wernher, Beit & Co. had made a second gift of twenty thousand pounds sterling to further the work of the association. A like amount, given some time ago with the stipulation that it should be used only so as to be of benefit to the poor of London, has been entirely spent in the erection and partial equipment of a sanitarium with 64 beds at Pine Wood, near Wakingham, and this second amount was given in order that the undertaking might be completed.

A plan is under advisement which will change very materially the course of instruction at present followed in the Medical Department of Columbia University. The new policy will closely follow the methods now used at Johns Hopkins and Harvard medical schools. A committee on the revision of the curriculum is reorganizing the course. One of the first institutions to go is the system of quizzes, which has been necessary in the past, owing to the failure of the college authorities to provide for adequate class-room reviews and recitations.—*Medical Record.*

A Crusade Against Scents.—Atlanta, Ga., it is said, is soon to have an ordinance which will bar persons carrying odors from riding on street cars. By "odors" the council means those scents which emanate from individuals who work in factories, and especially in guano factories, of which there are many in Atlanta. So loosely framed, however, is the ordinance, that it will be left to the discretion of the conductor and passengers as to what constitutes an unpleasant odor, and the former will have the power to eject any person from whom proceeds a smell offensive to any other passenger.

Automobile Bill Signed by the Governor of New York.—Governor Odell despite protests from those connected with the automobile trade and social organizations in all parts of New York State, has signed the Doughty-Bailey bill. The salient points of the new law are: Speed restricted to four miles an hour when crossing a dam or causeway of less than twenty feet in width. Speed restricted to eight miles an hour within a radius of half a mile from a post office or a greater radius if local au-

THE PRESBYTERIAN HOSPITAL

Will Receive all Classes

Of Medical and Surgical Cases,

(EXCEPT CONTAGIOUS.)

A Full Corps of PHYSICIANS

and SURGEONS in Attendance.

Address,

PRESBYTERIAN HOSPITAL,

Charlotte, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain CACTINA, the active proximate principle of CEREUS GRANDIFLORA.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for INDIGESTION

A palatable preparation of PANAX SCHINSENG in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

norities so elect; when passing in either direction, a person driving a horse or domestic animal, or passing a pedestrain in the roadways; when crossing an intersection main highway; in the closely built-up portions of cities. Speed restricted to ten miles an hour, when passing a public school during school hours, or a church during the hours of service. Speed restricted to ten miles an hour in the suburbs of cities where the houses are more than one hundred feet apart. Speed restricted to twenty miles an hour in the open country where postoffices, school houses, churches, causeways, cross roads, drivers, or pedestrians do not conflict. A motor must be stopped on request of a rider or driver. The penalties are: First offense, not exceeding $50; second offense not less than $50, nor exceeding $100, or imprisonment not exceeding thirty days or both; for third offense, imprisonment not exceeding thirty days and fine or not less than $100 nor exceeding $250.—*Med. Record.*

DOCTOR: Here is a Pointer for You, and This Is the POINT

ABBOTT'S SALINE LAXATIVE is the best eliminant and the basis of the best treatment for the uric acid diathesis and other auto-infections on earth.

It is particularly indicated in Summer Difficulties: To clear out, clean up, and keep clean means from sickness to health, and THIS WILL DO IT. Prove it for yourself.

KEEP IT ON HAND

IT DOES THE BUSINESS AND NEVER GRIPES

Abbott's Saline Laxative is over 80 per cent chemically pure Sulphate of Magnesium in effervescent combination, while its several imitators are ill-tasting, shabby affairs of less than one-fourth its strength. It is pleasant to take and suits all conditions where a prompt and efficient eliminent is required.

It is successfully prescribed by increasing thousands of doctors everywhere. Most jobbers and leading retailers are supplied. Specify on your prescriptions, or, if you dispense, order of jobber or direct from our laboratory for your office. Single package to physicians, by post, 35c. In lots of half dozen or more, per dozen, $4.00. Retail price, 50c. Direct orders we deliver prepaid when cash accompanies. See price list for discounts in gross quantities. Don't fail to try Abbott's Saline Laxative when you want results. It is pleasant to take, promptly efficient, does not nauseate and never gripes.

SALITHIA Our ready-to-use treatment for Rheumatism, Gout, and the thousand-and-one manifestations of the uric acid diathesis, is a soluble salt of lithium in granular effervescent combination with colchicine. A trial will demonstrate that this preparation is unexcelled. Same size and style as above. Retail price, 75c. One package to physicians, post-paid, 65c. In lots of half dozen up, $6.00 per dozen. Terms as above.

A COMPANION REMEDY to ABBOTT'S SALINE LAXATIVE, which should be used in all infective, fermentive conditions: dyspepsia, typhoid fever, Summer derangements, etc., is

THE W-A INTESTINAL ANTISEPTIC

A compound preparation of the C. P. Sulphocarbolates of lime, soda and zinc. It is efficient, non-irritating and first-class in every way. Price, tablets, 100, 35c.; 500, $1.40; 1000, $2.75. Postpaid for cash with order.

Samples and our complete price list of alkaloidal remedies—up-to-date supplies for the physician—will be sent on request to those who have not already been supplied, but more real satisfaction will result from the use of the corner coupon below.

We hope that every doctor really interested in good drugs, in advanced methods of medication, in protecting his practice will write us in answer to this ad.

For the attached coupon, which you should mail with your enclosure, we will send you three 25c. size cans of ABBOTT'S SALINE LAXATIVE, two 50c. size of ABBOTT'S SALITHIA, and 100 W-A INTESTINAL ANTISEPTIC TABLETS, also special literature on these products, and our complete price current of alkaloidal preparations.

WE ARE READY, SUPPOSE YOU DO IT NOW!
WRITE THE MOST CONVENIENT POINT.

CUT THIS OFF AND MAIL WITH YOUR ORDE

F
the e
clos
DOLLA
send me po
paid 2 cans S
size Abbot
Salithia; 3 ca
25c. size Abbot
Saline Laxativ
100 W-A Intestir
Antiseptic Tablets.

DR.....

TOWN.....

STATE.....

The Abbott Alkaloidal Co.

50 W. Broadway, New York. Ravenswood Station, Chicago. *13 Phelan Bldg. San Francisco.*

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these Preparations.

A

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

R Each fluidounce contains:

Hypophosphites	Soda	2 gr.
"	Lime	1½ gr.
"	Iron	1½ gr.
"	Quinine.	¾ gr.
"	Manganese ..	1½ gr.
"	Strychnine ..	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate	Sodium	12 grains
"	Potassium	4 "
"	Calcium	4 "
"	Iron	2 "

FREE Monohydrated Phosphoric Acid 16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

C

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence o a sedentery life, coupled with nervous and mental stal strain.

Reliable Pepsin is one of the best Digestive agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating. Children, one-half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromaticmenstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable.

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50.
N. B.—We also make **25 per cent.** strength.
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

Saloform, in Powder, per ounce	$1 25
Saloform, 5-grain Tablets, per 100	1 25
Saloform Elixir, pints	2 00
Solution Albuminate of Iron, Syrup Albuminate of Iron Comp., pints	1 00
Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

Please specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

Founded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

PSORIASIS
SCABIES
TINEA
HERPES
PHTHIRIASIS
ECHTHYMA
ACNE
AND OTHER
SKIN DISEASES

ECZEMA

Successfully Treated with the
New Dermatological Remedy

CHAPARRIN

Representing the active principles of the Texas Shrub Chaparro Amargosa in combination with Phenol, Salicylic Acid and Camphor. Remarkable success has been reported in the use of CHAPARRIN, the results in indicated cases being exceedingly gratifying. Speedy and permanent relief follows in much less time than under former methods of treatment.

Applied in sufficient strength CHAPARRIN always allays itching.

Physicians are requested to have their druggist place order for half dozen CHAPARRIN so that prescriptions can be more conveniently filled. Address

THE MATTHEWSON LABORATORY,

MARSHALL, TEXAS.

The following prices include postage or expressage :

1	2-oz. bottle Chaparrin	$1 00
1	4-oz. " "	1.75
6	2-oz. " "	4.75

CATARACTS!

USE **Success Cineraria Maritima.** (BARNES'.)

Successfully used for removal of CAPSULAR and LENTICULAR CATARACTS, CORNEAL OPACITIES.

Does not cause Inflammation.

Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy :

"Mrs C—, aged 73. The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis : gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Success Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

Dr. Osmon Royal, under date of June 4th, 1903, writes :

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Success Cineraria (Barnes)."

Dr. E. V. Cobb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Success Cineraria Maritima (Barnes).

MADE FROM THE FRESH GREEN PLANT ONLY.

$1.00 per vial 2 drachm. $3.00 per oz. by mail, post paid.

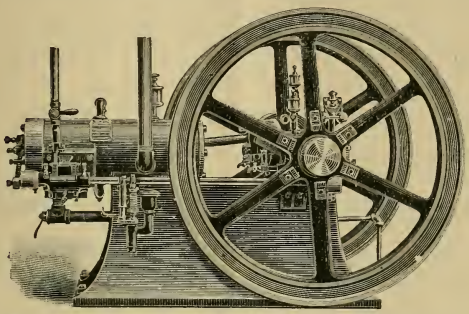
Send for literature. Made exclusively by

THE BOTANIC DRUG COMPANY,

BRIDGEPORT, ALA., U. S. A.

GAS AND GASOLENE ENGINES

Available for all Power Purposes, and built in sizes from one to 100 H. P.



THE FAIRBANKS COMPANY.

"FAIRBANKS" STANDARD SCALES.

19 and 21 Light Street, - - - - - BALTIMORE, MD.

Write for catalogue and particulars.

ECTHOL, NEITHER ALTERATIVE NOR ANTISEPTIC IN THE SENSE IN WHICH THOSE WORDS ARE USUALLY UNDERSTOOD. IT IS ANTI-PURULENT, ANTI-MORBIFIC--A CORRECTOR OF THE DEPRAVED CONDITION OF THE FLUIDS AND TISSUES.

SAMPLE (12-oz.) BOTTLE SENT FREE ON RECEIPT OF 25 CTS.

FORMULA:--Active principles of Echinacia and Thuja.

BROMIDIA
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U. S. A.

Jefferson Medical College

OF PHILADELPHIA.

New College Building and New Laboratories.

The Seventy-Ninth Annual Session will begin September 24th, 1903, and continue eight months. For four annual sessions the curriculum provides without extra fee: 1. Practical manual training in ten different laboratories recently fitted up at heavy cost. 2. Recitations by the faculty and others. 3 Didactic lectures and demonstrations in the commodious new buildings. 4. Clinics and bedside ward work in small groups at the College Hospital, beside the clinics given by the staff of the College at the Pennsylvania, Philadelphia, German, St. Joseph's and Municipal Hospitals. 5. Lying-in cases at the College Maternity.

A New Fire-Proof Hospital, with unrivalled facilities for clinical teaching, is now building at a cost of $700,000.

For circular and information, address **J. W. HOLLAND, Dean.**

University College of Medicine,

RICHMOND, VIRGINIA.

MEDICINE — DENTISTRY — PHARMACY.

Unity — — — — *therefore,* strong courses.
Concentration — *thereby,* strong teaching.
Method — — — *therefrom,* strong students.

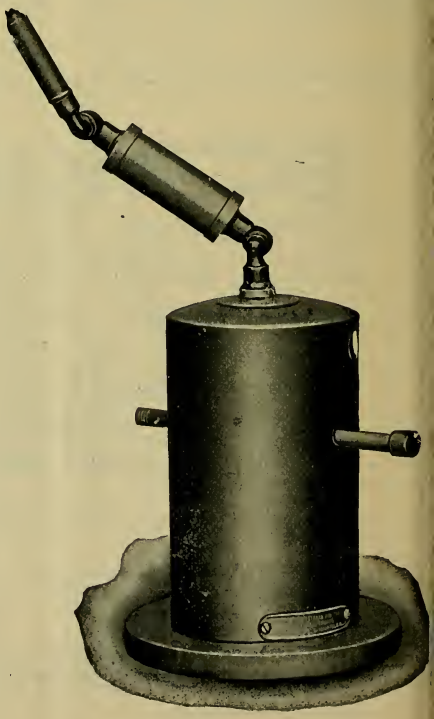
CATALOGUE — 100 PAGES — ON APPLICATION.

The Hopkins Compressed Air Heaters

Electric Gas Alcohol

The Perfect Instrument for treatment of the ear with superheated air. Practically indestructible. Patented in all features. All kinds of special electric heaters for medical work. Write for booklet.

THE TERRY HEATER CO.,
Cleveland, Ohio.



"THE KEY TO HEALTH."

Jackson Springs, Moore, N. C.

A health and pleasure resort conveniently located in the Long Leaf Pine section in North Carolina, where malaria and mosquitoes are unknown. The nights are cool, the air pure and balmy. Hotel accommodations unsurpassed; hot and cold baths. Those seeking amusements will find up-to-date Golf Links, Tennis Court, Croquet Grounds, Ten-Pin Alley, etc. Transportation facilities first-class; telegraph and express offices conveniently located.

Jackson Springs Water has long been used with excellent results in many chronic diseases, and is considered by all who have used it as a specific in dyspepsia and indigestion.

It increases the appetite, and enables the patient to digest all food taken without trouble or inconvenience in any way, thereby increasing the strength of the patient and producing that condition of health so much desired. Catarrh of the liver, stomach or bowels, where the organic changes have not been too extensive, is always benefited and many times, most miraculously cured by the use of this water. In all cases of Cystitis, not due to stone, Jackson Springs water relieves immediately, if taken properly, and will in short time make a complete cure. Nervousness, when not due to some organic condition, is relieved at once by the use of this water, and especially is this the case when the nervousness is caused by over-work, indigestion and malassimulation. This water exercises an indisputable therapeuticial influence in chronic Bright's disease, patient at once gaining in strength with the power to take and digest food, and at the same time an analysis shows that the condition of the kidneys are improving.

In Renal Calculi, Gout, Rheumatism, Uric Acid, Dethearis, Anæmia, Sleeplessness, or brain fag, Jackson Springs water may safely trusted to relieve in a short time if taken properly.

Hypernemia of the Liver, with its furred tongue, nausia, bilious, diarrhœa, sallow complexion, headache, irritability, general feeling of depression, and malaise are very successfully treated by a course of Jackson Springs water.

This water possesses to a remarkable degree the power of effectively cleansing the bowels, stimulating the liver and expelling poisonous matter which may have accumulated in the [system, and thus giving the patient a new lease on life and making him feel like a new man.

Children do well here, especially those who have recently suffered from bowel and stomach troubles. Jackson Springs is an ideal resort for those patients convalesing from recent sickness. The water is delightfully cool and refreshing, and can be taken in large quantities.

Analysis: Jackson Springs Water.

North Carolina Agricultural Department, Experiment Station.

Analysis No. 6,147. Raleigh, N. C., Jan. 3, 1890.

Sir:—The sample of mineral water sent to the Station for analysis, in a demijohn marke dP. M. Wilson, contains on evaporation, per U. S. Gallon—

SOLIDS.

Sulphate of Potash	.577	grains
Sulphate of Soda	.263	"
Chloride of Soda	.825	"
Carbonate of Soda	.578	"
Carbonate of Lime	1.721	"
Carbonate of Magnesia	.833	"
Oxide of Iron and Aluminum	.181	"
Sodium Phosphate	Trace	
Silica	2.567	"
Total	7.546	"

Your obedient servant,

H. B. BATTLE, [Seal.]
Director

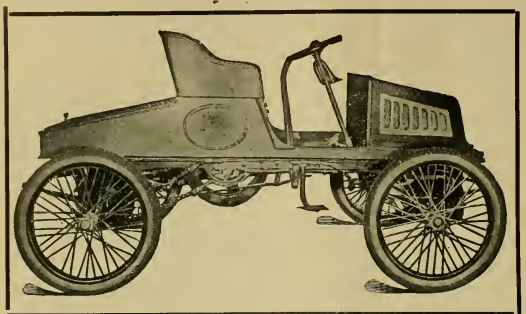
Dr. A. C. Bethune, resident physician, is located in hotel and will be pleased to send testimonials and give any other information desired.

For space and rates address

C. L. BAXTER, Manager Jackson Springs Hotel,

Jackson Springs, N. C.

THE "ZENTMOBILE"



Where quality is desired, where comfort, durability and genuine pleasure is demanded in an automobile, this machine should be investigated before ordering.

We are all after results in an automobile, as well as everything else, and the best results are only obtained by years of persistent experimenting. We have passed through this stage. Don't buy an experiment. Get something that will require the least attention. It is a "ZENTMOBILE." - - - Get price and full particulars.

SINGLE CENTRE SPRING COMPANY, Evansville, Ind.

University of Maryland

SCHOOL OF MEDICINE.

The Ninety-Seventh Regular Session will begin October 1st, 1903, and continue until May 15th, 1904. Four Years Graded Course. New Laboratory Building. Excellent Laboratory Equipment. Clinical Advantages Unsurpassed. For catalogue and other information, address

R. DORSEY COALE, Ph. D., Dean,

University of Maryland, Baltimore, Maryland.

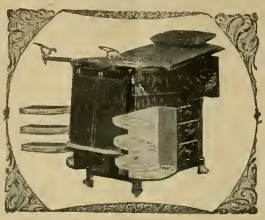
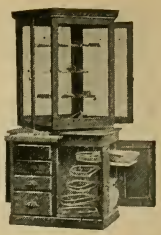
Chattanooga Medical College

Session of 1903-4.

MEDICAL DEPARTMENT OF GRANT UNIVERSITY.

Fifteenth Annual Session begins in October and continues until April. New buildings. Delightful climate. Large patronage. Every facility. A full teaching corps. Laboratories with latest equipment. Modern methods of instruction. Excellent hospital. Minimum living expenses. City one of the most beautiful in America, both by nature and art. National Military Park, National Cemetery, and miles of splendid Government Boulevards. Scenic surroundings unexcelled on this continent. Requirements those of Southern Medical College Association.

. A. GOBLEIGH, M. D., Dean, Chattanooga, Tenn.

A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your patients. Therefore, in the selection of your equipment you should exercise great care. The testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

Are the best and are adapted to all lines of regular and special practice. They are superior in workmanship and design, and include more conveniences than any other line on the market. (Catalogue "A" fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

A Sanatorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

Beautifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

MAPLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

---

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &c.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents.

Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

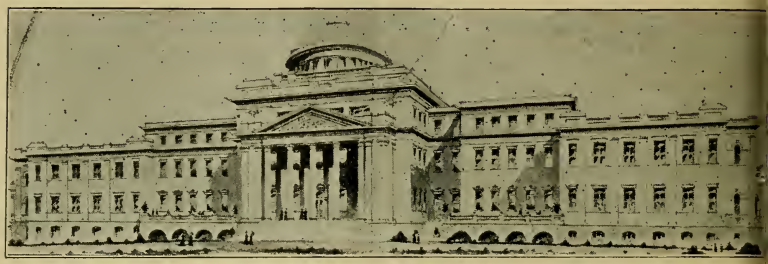
POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

Presbyterian College for Women....

Charlotte, N. C.



Magnificent New Buildings. Every Essential of Health and Comfort. Good Fare. Experienced Teachers. Standard Advanced. Music and Art our Specialties. Charges lower than any other School of same grade in the South.

REV. J. R. BRIDGES, D. D., President.

Elizabeth College and Conservatory of Music for Women

CHARLOTTE, N. C.

1. Is situated in the famous Asheville district, a section pointed out by the United States expert, Prof. N. S. Shaler, as having the most charming climate in the United States.

2. Has College Grounds, Buildings and Equipment worth $250,000.00.

NOTE: The site is suburban and healthful and is connected by electric car line with all parts of the city.

3. Has a College Curriculum leading to the degree of A. B., on a level with the university grade; a Music Conservatory ranking with the best in the South; and an Art Department, embracing not only drawing and china painting, but also designing, clay modeling and sculpture.

NOTE: The College has a separate, well-equipped Music Conservatory building.

4. Has a Faculty of speclalists.

NOTE: Experienced teachers only are employed. Members of the Faculty represent in post-graduate study, eleven American and European Universities and Conservatories of international reputation.

5. Has a select patronage, drawn to the institution by its recognized superior advantages and not by cheap rates.

6. Has established a reputation for good health and thorough work.

For Catalogue, Address

CHAS. B. KING, President,

Charlotte, = = = = = North Carolina.

Don't Send Your Patients to the Springs, But Keep Them at Home Under Your Own Care, and Treat Them With . . . . .

Echols' Piedmont Concentrated Iron and Alum Water.

PIEDMONT SPRINGS.

For seventy-five years people from all over the country have visited the Iron and Alum Springs of Virginia in search of health, but this is no longer necessary. Our Concentrated Water, which is reduced 160 times (10 gallons to 8 ounces), produces even better results than when the natural water is used, for it is taken as a medicine, teaspoonful in half glass of ordinary water four times a day, and is more effectual than the natural water for various reasons. By this method a greater quantity of minerals can be introduced into the system, and this is where benefit is derived from drinking mineral water. Our Concentrated Water is in no wise a patent medicine, but simply a Natural Mineral Water Remedy in concentrated form, and no physician can violate the "code of ethics" in prescribing it, for many eminent practitioners are daily recommending and using it. See analysis in May issue of Journal.

We will be glad to send you an 18-oz. bottle free of cost, if you will test it.

Sold by all druggists. 8-oz. bottles 50 cents. 18-oz. bottles $1.00.

J. M. ECHOLS COMPANY, - - LYNCHBURG, VIRGINIA.

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED IN 1881—OPENED IN 1882.

The New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant, and the hospital wards adjoin the lecture rooms. Since the fire in 1896, a new building has been erected and thoroughly equipped, and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James P. Tuttle, M. D.; John A. Wyeth, M. D.
MEDICINE—Isaac Adler, M. D.; Morris Manges, M. D.; W. H. Katzenbach, M. D.; J. D. Nisbet, M. D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt. H. Wylie, M. D.; Brooks H. Wells, M. D.; W. Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—August Seibert, M. D.
DERMATOLOGY—Edward B. Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O. Born, M. D.; W. E. Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M. D.; Robert C. Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederich Whiting, M. D.
EUROLOGY—B. Sachs, M. D.
OBSTETRICE—Edward A. Ayers, M. D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York.

THE CHARLOTTE OBSERVER,

CHARLOTTE, N. C.

J. P. CALDWELL, Editor. DAILY AND SEMI-WEEKLY.

North Carolina's Foremost Newspaper.

Independent and fearless; bigger and more attractive than ever. The most complete telegraphic Press reports in existence. All the news of the world. Complete Daily reports from the State and National Capital

SUBSCRIPTION PRICE.

Three Months	$2 00
Six Months	4 00
One Year	8 00

THE SEMI-WEEKLY OBSERVER, Published on Tuesdays and Fridays at $1.00 per year.

CASH OR CREDIT.

Catalogue FREE.

PRICE $33.50

It will pay you to send for our Catalogue No. 6, quoting prices on Buggies, Harness, etc. We sell direct from our Factory to Consumers at Factory Prices. This guaranteed Buggy only $33.50; Cash or Easy Monthly Payments. We trust honest people located in all parts of the world.

Write for Free Catalogue.

MENTION THIS PAPER.

CENTURY MF'G CO. DEP'T 352 East St. Louis, Ill.

"No physician can afford to be indifferent regarding the accurate filling of his prescriptions."

PROTARGOL

The Non-Irritating Substitute for Nitrate of Silver.

HEDONAL

The Promoter of Natural Sleep.

TANNIGEN

The Intestinal Astringent

LACTO-SOMATOSE

The Food for Diarrheal Diseases.

FERRO-SOMATOSE

The Ferruginous Nutrient and Tonic.

HELMITOL

The Urinary Antiseptic, Analgesic.

THEOCIN

The Most Powerful Diuretic.

Samples and Literature supplied.

MELLIN'S FOOD FORMULAS

This is a sample page:

FOR INFANTS ABOUT SIX MONTHS OLD
RICH MILK

Mellin's Food,
2 tablespoonfuls (heaping)
Rich Milk,
12 fluid ounces
Water,
4 fluid ounces

The analysis of this mixture is as follows:

Fat	3.10
Proteids	3.00
Carbohydrates (no starch)	6.90
Salts	.79
Water	86.21
	100.00

We issue a BOOKLET of physicians' formulas for the

Home Modification of Fresh Cow's Milk

This Formula Booklet also gives other combinations of fats, proteids, and carbohydrates to suit varying conditions.

We should be pleased to send you the Formula Booklet free of charge.

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS

ERGOAPIOL (SMITH)

THERAPEUTIC QUALITIES

THE absolute absence of all OPIATES, NARCOTICS, and ANALGESICS, thus offering, instead of false roundabout and mere transitory relief, a true and scientific treatment for AMENORRHEA, DYSMENORRHEA, and other IRREGULAR MENSTRUATION.

In these conditions and the most obstinate cases of SUPPRESSED and RETARDED MENSTRUATION, Ergoapiol (Smith) (though devoid of the above unpleasant features, which are so often followed by a sad sequela) possesses a remarkable power to obviate pain and to bring about a healthy activity of the menstrual functions through its direct tonic and stimulating effect upon the Uterus and its appendages.

CAUTION.

To obviate Substitution or other possible error in compounding, it is advisable always, besides specifying ("Smith") when prescribing Ergoapiol (Smith), to order in Original Packages only, as in facsimile prescription appended.

These packages contain twenty capsules each, and are so constructed that all printed matter pertaining thereto can be readily removed.

℞

Ergoapiol. (Smith)--- Caps. XX.
Orig. pack.

MARTIN H. SMITH CO.,
NEW YORK, N. Y

SOLE BRITISH AGENTS:
THOMAS CHRISTY & CO.,
LONDON, E. C.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

BROADOAKS SANATORIUM.

ISAAC M. TAYLOR, M. D.

Morganton, North Carolina.

A Private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

RIO TRADE MARK

Women suffering from an Aching Back, Bearing Down Abdominal Pains, or any abnormal condition of the Uterine system, should be given ALETRIS CORDIAL RIO in teaspoonful doses four times a day.

Rio Chemical Co., New York.

St. Luke's Hospital,

1000 West Grace St.,

RICHMOND, VIRGINIA.

Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,

RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.

When writing advertisers please mention this Journal.

AS The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing *of ORIGINAL BOTTLES by every physician* who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our

. . . regular eleven-ounce hexagonal bottle, . . .

you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

"No physician can afford to be indifferent regarding accurate filling of his prescriptions

BOVININE in ANÆMIA

BOVININE overcomes *Anæmia* logically, rationally and radically, for several substantial reasons:

1. Because it supplies the starving organism with the requisites for immediate reparation.

2. Because it needs no preparation or transformation at the hands of the vital machinery before it can be assimilated and converted into living force. Scores of theoretically excellent foods lack this vital condition, and are therefore appealed to in vain.

3. Because the condition called *Anæmia* results from a form of malnutrition which is not caused by lack of any nutritive element, but by the absolute inertia of the digestive function.

BOVININE comes to the rescue by supplying a vitalized and perfectly compounded pabulum that calls for no chemico-vital effort or expenditure whatever.

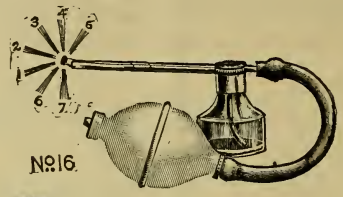
Have we made the contrast between **BOVININE** and all the rest of the prepared foods distinct enough?

If not, please apply the crucial test—clinical use—at our expense, and convince yourself that our claims are neither extravagant nor exaggerated, but are strictly based on science.

The Bovinine Company

75 West Houston Street, NEW YORK

DeVilbiss Universal Atomizer No. 9. All Metal.—Will throw a spray in any direction desired. Heavy oils and vaseline by heating, light oils and watery solutions without. Can be used with rubber bulb or compressed air. **Price to Physicians, $1 25. Postage 6 cents.**



Two bottles furnished with this instrument. One to be used for water solutions and the other for oil.

The DeVilbiss Universal Atomizer, No. 16.—Unexcelled for patient's own use. **Price to Physicians. $1.25.** Some of the advantages of the DeVilbiss Universal Atomizers over others are:

1. They throw a spray of any kind of liquid, oils, aqueous or alcoholic solutions.
2. The point can be turned in any direction, consequently it will do the work of three atomizers of any other style without extra tips, which are liable to be lost when you need them most.
3. By closing hole in cap on bottle with the finger, a very coarse spray or stream will be thrown which serves to clean it out or can be used for douching.
4. Medicine may be mixed in the bottle by closing the hole on cap of point with the finger, and turning on air current or compressing the bulb.
5. All parts are interchangeable; any part can be replaced that may be broken or lost.
6. Our improved connection enables them to be used with either a bulb or cut-off without extra fittings.

DIRECTIONS AND GUARANTEE TO PURCHASER.

To make aceptic, unscrew hard rubber piece, place in a carbolized solution and boil metal part and bottle.

To clean Spray Tube, put cleansing solution in cup, place thumb tightly over hole in cap on bottle and by using air pressure a heavy spray will be thrown from point of tube. Should this fail to clean the tube, unscrew cap "A" and remove particles with a tooth-pick. Be sure to run it through small opening as this must be kept clean in order to have perfect atomization. Should it not work, remove point "C" as shown in illusration with a knife blade; take out all particles with a pin or tooth-pick from the openings in the point and replace in the same manner as removed with the letters "UP" on the upper side. Should this fail, return to us and we will repair or replace free of charge.

DeVILBISS MFG. CO., Toledo, Ohio.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions

PEACOCK'S BROMIDES

PURITY
THE BEST IS THE CHEAPEST

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.
DOSE:
One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day. **OD CHEM. CO., NEW YORK.**

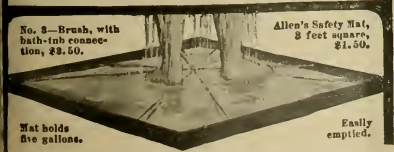
A Bath for Beauty and Health.

Allen's Fountain Brush and Bath Outfit

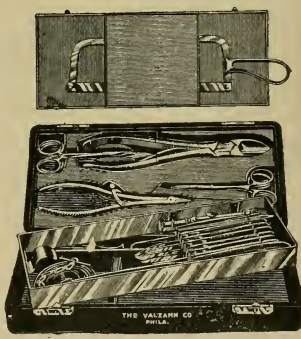
Friction, Shower and Massage Combined. The only Sanitary Bath Brush that at one operation thoroughly cleanses the skin, imparting a healthy tone and glow, and puts one in a condition to resist colds, la-grippe and all contagious and infectious diseases. Furnished either for bath tub connection, or with our fountain and Safety Portable Floor Mat. Enabling one to take a perfect spray and frictional bath in any room. With this outfit one is independent of the bath room, as a better bath can be taken with two quarts of water, than with a tub-full the old way. Insures a clear complexion, bright eyes, rosy cheeks, cheerful spirits, sound sleep. Should be in every home, and every travelers trunk or grip. Full outfit No. 2, consisting of Fountain Brush; combination rubber hot water bag; bath fountain and syringe and safety mat. Price $5.50.

Agents are making from $25 to $75 per week selling these outfits. Send for FREE booklet, "The Science of the Bath," prices and terms.

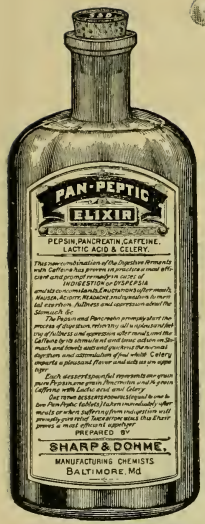
THE ALLEN MANUFACTURING CO. 429 Erie St., Toledo, O.



Valzahn Co.'s Amputating and Trephining Case.



Contents—1 Amputating Knife, 1 Scalpel, 1 Finger Knife, 1 Tenatome, 1 Curved Sharp Bistury, 1 Curved Blunt Bistury, 1 Tenaculum, 1 Grooved Director, 1 Pair Probes, 1 Trephine, 1 Tourniquet, 1 Dressing Forcep, 1 Amputating Saw, 1 Bone Forcep, 1 Needle Holder, 1 Straight Scissor, 1 Curved Scissor, 2 Pean's Haemostatic Forceps, 2 Tait's Haemostatic Forceps, 6 Needles, 1 Card Silk, 1 Coil Silver Wire, 1 Coil Catgut. All in fine Leather Case, $17.00. Knives are in Aluminum Rack removable to facilitate sterilization. **The Valzahn Company**, Manufacturers and Importers of Surgical Implements and Hospital Supplies, 132 South 11th Street, Philadelphia, Pa.



PAN-PEPTIC
ELIXIR
PREFERRED BY AND FOR
LADIES AND CHILDREN.

SHARP & DOHME'S

PAN-PEPTIC

ELIXIR TABLETS

APPETIZING TONIC DIGESTIVE
PALATABLE EFFECTIVE

THESE ELEGANT PRODUCTS
ASSIST DIGESTION PREVENT INDIGESTION
RELIEVE AND OFTEN CURE

INDIGESTION

DIARRHEA AND CHOLERA INFANTUM

MADE ONLY BY

SHARP & DOHME

BALTIMORE
CHICAGO - NEW ORLEANS - ST. LOUIS
NEW YORK

PAN-PEPTIC
TABLETS
25¢ - 50¢ - 100¢

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

University of Pennsylvania

Department of Medicine.

The 138th Annual Session will begin on the last Friday in September, 1903, at 12 m., and will end at Commencement, the third Wednesday in June.

The Curriculum is graded, and attendance upon four annual sessions is required.

Practical Instruction, including laboratory work in Chemistry, Histology, Osteology, Bacteriology, Pathology, Physiology and Pharmacy, with bedside instruction in Medicine, Surgery, Gynæcology and Obstetrics, is a part of the regular course, and without additional expense.

For catalogue and announcement containing particulars, apply to

DR. CHAS. H. FRAZIER, Acting Dean,

36th St. and Woodland Ave., Philadelphia.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.

Dr. W. F. Goldsmith, General Surgery.

Dr. C. C. Stockard, General Medicine and Drug Habits.

Dr. S. G. C. Pinckney, Nervous Diseases.

Dr. J. M. Crawford, Eye, Ear, Nose and Throat.

Dr. Michael Hoke, Orthopoedic Surgery.

Dr. E. C. Davis, General Surgery.

Dr. W. Munroe Smith, General Surgery.

Dr. M. A. Purse, Children's Diseases.

Dr. W. L. Champion, Genito-Urinary Diseases.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

17 W. Cain Street, Atlanta, Ga.

Table of Contents.

PAGE

EDITORIAL:

The New Constitution 365

The Treatment of Venerial Diseases 366

EDITORIAL NOTES:

Code of Ethics Now Inocuous 368

University Epidemics 368

Secrets in Medicine 368

ORIGINAL COMMUNICATIONS:

Primary Tuberculosis of the Tonsils: Richard H. Johnston, M. D. 369

Treatment of Typhoid Fever: L. F. Griffith, M. D. 374

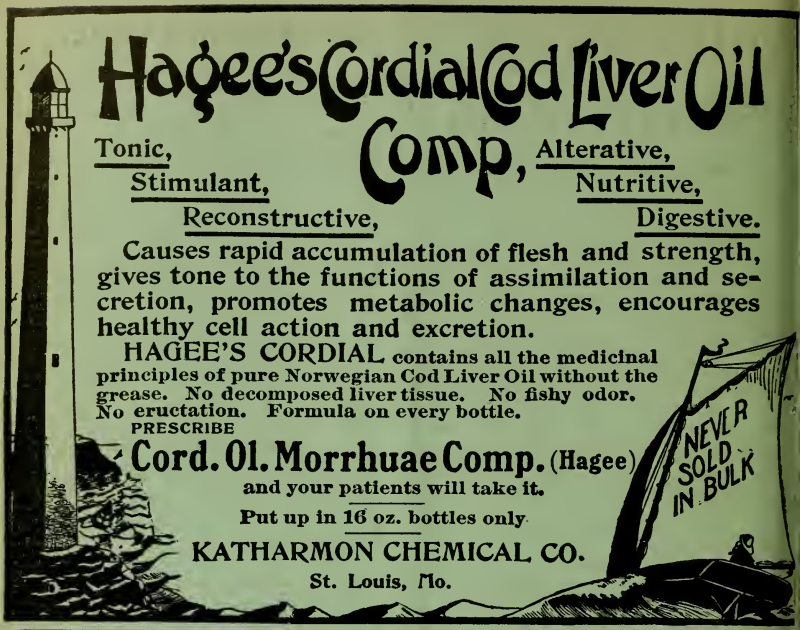
SELECTED PAPERS 378

NEWER MATERIA MEDICA 383

BOOK REVIEWS 392

REVIEW OF MEDICAL AND SURGICAL PROGRESS 393

MEDICAL NEWS AND ITEMS 412


Hagee's Cordial Cod Liver Oil
Comp,
Tonic,
Alterative,
Stimulant,
Nutritive,
Reconstructive,
Digestive.
Causes rapid accumulation of flesh and strength, gives tone to the functions of assimilation and secretion, promotes metabolic changes, encourages healthy cell action and excretion.
HAGEE'S CORDIAL contains all the medicinal principles of pure Norwegian Cod Liver Oil without the grease. No decomposed liver tissue. No fishy odor. No eructation. Formula on every bottle.
PRESCRIBE
Cord. Ol. Morrhuae Comp. (Hagee)
and your patients will take it.
Put up in 16 oz. bottles only
KATHARMON CHEMICAL CO.
St. Louis, Mo.
NEVER SOLD IN BULK

Index to Advertisers.

	PAGE
Fairchild Bros. & Foster .....Cover	1
Parke, Davis & Co. ..... "	1
Lambert Pharmacal Co..... "	2
Mr. Fellows..... "	3
The Sanitarium..... "	4
Glycosine Phosphate Co ..... "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.	1
Martin H. Smith Co	2
Broadoaks Sanatorium.....	3
Rio Chemical Co.	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.....	5
DeVilbiss Mfg. Co.....	6
Peacock Chemical Co.....	7
Od Chemical Co.	7
Allen Mfg Co.....	7
The Valzahn Co.....	7
Sharp & Dohme.....	8
University of Pennsylvania.....	9
The Halcyon Retreat.....	9
Katharmon Chemical Co.....	10
Mariani & Co.....	11
The Antikamnia Chemical Co.....	11
Oakland Chemical Co.	12
Battle & Co.	12
Kress & Owen Co.	13
The Purdue Frederick Co.....	14
Wm. R. Warner & Co.	395
North Carolina Medical College.....	397
H. K. Mulford Co.....	399
Leukretol Chemical Co.	401
The Abbott Alkaloidal Co.....	403

	PAGE
Invalids Table Co.	404
The Keeley Institute.....	404
Dad Chemical Co.....	404
The Tilden Co.....	405
Chattanooga Medical College	407
University of Maryland.....	407
University of Virginia.....	407
College of Phys. and Surg of Balto.	407
Dr. E. R. Russell	409
Dr. A J. Crowell.....	409
Dr. W. O. Nisbet.....	409
Dr. W. H Wakefield	409
The Presbyterian Hospital	411
Sultan Drug Co.	411
Dr A. M. Whisnant	411
Dr. John R. Irwin.	411
The Mathewson Laboratory.	412
Robinson-Pettet Co.	413
The Botanic Drug Co.....	414
The Fairbanks Co.....	415
Jefferson Medical College.....	416
University College of Medicine.....	416
Jackson Springs.....	417
The Terry Heater Co	418
W. D. Allison Co.....	419
Maplewood Sanatorium.....	419
Munn & Co.....	419
R. L. Polk & Co.....	419
Presbyterian College for Women	420
Elizabeth College and Conservatory of Music	420
J. M. Echols Co.	421
N. Y. Poly. Med. School and Hospital	422
Single Centre Buggy Co.....	422

Written Endorsements From More Than 8000 Physicians.

VIN MARIANI INTRODUCED NEARLY HALF A CENTURY AG

"The Preparation which made Coca known as a remedy!"

Priority, Facilities and Processes of Manufacture

MAINTAIN MARIANI COCA PREPARATIONS INIMITABLE.

AVOID "COCA WINES" Extemporaneously made with **Cheap Wine and Cocaine.**

Substitutes harm Patient and Physician and betray confidence in the unique properties of Coca.

VIN MARIANI

Represents TRUE COCA with a Sound Nutritious FRENCH WINE;

An Adjuvant to all other Remedies in

Convalescence — Wasting Diseases — Neurasthenia

And Allied Conditions from any cause.

THE COCA LEAF

A PERIODICAL ADVOCATING THE RATIONAL USES OF COCA

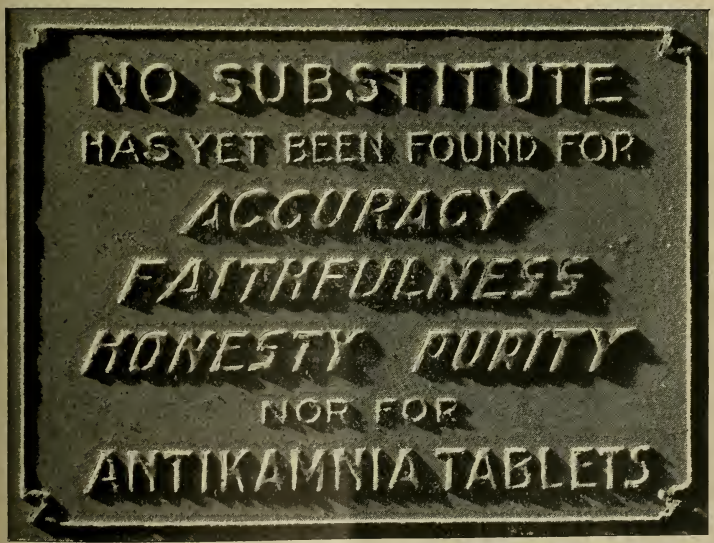
MAILED FREE TO PHYSICIANS ON REQUEST.

Inquiries from Physicians Receive Ethical Consideration.

MARIANI & CO.,

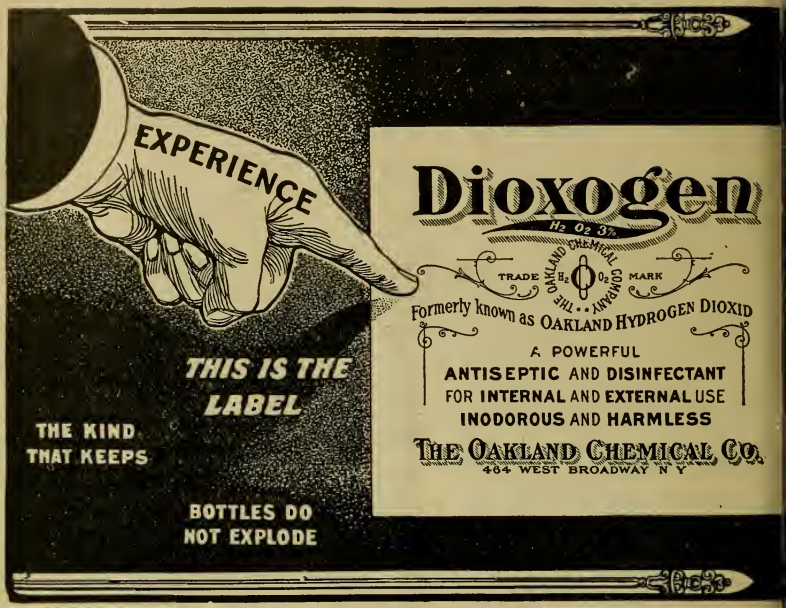
52 West 15th Street, New York.

PARIS. LONDON, BERLIN, MONTREAL. Laboratories: Neuilly Sur-Seine, FRANCE



| AK | Antikamnia & Salol Tablets
Antikamnia & Quinine Tablets | AK | Antikamnia & Codeine Tablets
Antikamnia & Heroin Tablets | AK |

When writing advertisers please mention this Journal.



PAPINE IS THE PAIN-RELIEVING PRINCIPLE OF OPIUM. ONE CAN DISPENSE WITH OPIUM THE NARCOTIC; ONE CANNOT DISPENSE WITH OPIUM THE PAIN-RELIEVER. PAPINE PRODUCES NO TISSUE CHANGES, NO CEREBRAL EXCITEMENT, NO INTERFERENCE WITH DIGESTION.

Sample (12 oz.) Bottle Ecthol Sent Free on Receipt of 25 Cts. to Prepay Express.

FORMULA:--One fluid drachm is equal in anodyne power to 1-8 gr. Morphine.

BROMIDIA
ECTHOL
IODIA

BATTLE & CO., CHEMISTS CORPORATION. ST. LOUIS, MO., U. S. A.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions

GLYCO-THYMOLINE

INDICATED
IN TREATMENT OF

Summer Complaints

ALTERATIVE
ALKALINE
ASEPTIC

——— Reports following case:

GASTRO-ENTERITIS, where there was constant vomiting. ild, twelve months old; gave one-half teaspoonful Glyco- ymoline in hot water every hour until five doses were taken, so used Enema of Glyco-Thymoline, one tablespoonful in four nces of water. This treatment gave prompt relief, and I believe ved the child's life.

——— Reports following case:

DYSENTERY: Patient, 16 months old, took to vomiting and nning off at bowels six days before I was summoned. When reached there, found the patient passing foul and bloody dis- arges, immediately put patient on Glyco-Thymoline and Liquid smuth, equal parts, teaspoonful every two hours; just after the cond dose was given I could see a marked change. Patient proved fast, and in about three days had completely recovered.

Other similar cases treated with Glyco-Thymoline gave me ually good results.

SAMPLES ON APPLICATION

RESS & OWEN COMPANY, 210 Fulton Street, New York

DO NOT FORGET

the importance of a remedy
that pacifies the irritable stomach
and intestines. This attribute of

GRAY'S Glycerine TONIC Comp.

makes it the most valuable
Summer tonic and reconstructive
in malnutrition, nervous exhaustion
and general debility.

THE PURDUE FREDERICK CO.,
No. 15 Murray Street, New York.

MULFORD'S PRE-DIGESTED BEEF A TRUE NATURAL FOOD

Mulford's Pre-Digested Beef

represents the entire nutritive value of meat in a completely digested form.
It is immediately absorbed by the stomach. Of the total albuminoids (that is nutritive material) in **Pre-Digested Beef,** two-thirds consist of albumoses and one-third of peptones; this high value in albumoses and peptones entitles **Pre-Digested Beef** to the distinction that it is the **most valuable, concentrated, immediately assimilable nourishment known.**

MULFORD'S PRE-DIGESTED BEEF

is of especial value as an exclusive diet in typhoid fever, pneumonia, la grippe, all types and forms of convalescence, phthisis, and the mal-nutrition of organic and constitutional diseases, such as Bright's disease, neurasthenia, and nervous diseases. The incidental, unpleasant symptoms which usually follow the use of milk and artificial foods are not induced by **Pre-Digested Beef,** hence its unique value after gynecologic and other surgical operations.

IN ORDERING OR PRESCRIBING, SPECIFY "IN ORIGINAL PINT BOTTLES"

LITERATURE MAILED UPON REQUEST

MULFORD'S PRE-DIGESTED BEEF A TRUE NATURAL FOOD

INTRODUCED BY
H. K. MULFORD CO.
CHEMISTS
Philadelphia Chicago

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., AUGUST, 1903. No. 8

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

Subscription $1.00 per year, in advance.
Subscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
Receipts.—The receipt of all money is immediately acknowledged.
Important Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it coutinued expecting to receive a remittance at their earliest convenience.
We Notify all subscribers when their paid subscription expires.

EDITORIAL.

THE NEW CONSTITUTION.

At the last session of the North Carolina Medical Society, a constitution and by-laws were adopted to meet the requirements of the plan of reorganization of the American Medical Association, this plan having for one of its purposes the uniting of all the societies (and physicians) in one organization.

In many respects the new constitution is an innovation and radical in its changes. We propose to note some of its features and the advantages which may be expected of them.

Chief among the changes is the accentuation of the County Medical Society as the starting point, or unit, of the Association. Since the organization of the State Society, the County Society has not been an integral part of the body, but only an auxiliary to it. Either could exist without the other, and practically did so exist. Under the new order this has passed away, and now if there is a State Society, there must first be county societies.

Statistics are not at hand to show the number of county, city and town organizations, but there is a woeful scarcity of them, and while some few wield an influence for good in their respective communities, it is doubted if any come up to the full measure of usefulness.

There is need of organization—a unity of action—a harmonious blending of our interests in order to accomplish the best results. It is in the county medical societies that this organization must be effective if good is accomplished at all. It is here the eighteen hundred doctors of the State are to be brought in touch with each other and each gain by contact. Collectively, they will be a power in the upbuilding of the profession, and for the good of the public at large. What may be accomplished is almost incalculable.

The success of the plan depends upon the ability of the leaders to interest the rank and file of the profession in the movement. The work must be undertaken with a full sense of its importance and the difficulties of the task, and an early effort made to secure a start in each county.

By a complete organization of the physicians of the State (and nothing short of this should be contemplated) a powerful force in the country doctor, that is not now utilized, will be won to the State Society. All over the State, in the outlying districts, are many physicians of more than ordinary ability, whose lights, through diffidence partly, perhaps, but largely through indifference, are hid under a bushel. These should be reached, drawn out and their worth recognized. They must be made to feel that they are a part of the State Society—through their county delegate have a voice in its management and encouraged to take an interest in its affairs.

A most excellent feature is the one putting the general welfare of the profession, "the scientific, moral and material condition of every physician," in the care of the county society. Along this line and in connection with it, may be mentioned the provisions for bringing forward the young men of the profession, encouraging post graduate work, in fostering and using at home, in the county society, the work of its own physicians, advocating original research and frequent meeting of the county society. From each and all of these benefits will be derived.

The election of a representative in the House of Delegates is another duty now placed on the county medical society, and it should be a source of pleasure to the individual member in knowing that, though absent from the society meeting, each man may feel that he has a representative there to aid in shaping the policies of the association and direct its management.

The separating of the work into different departments and putting the business features of the society work into the hands of an elective body ought to give more time and better opportunities for scientific work. The reading of papers and the discussion of purely scientific matter will not be interfered with by attention to details of routine matters. The House of Delegates will be the business and legislative part of the society, and as the members are elected, and in the majority of cases will owe their election to their public spirit and known interest in the progress of the profession, we may confidently expect the business of the society will be attended to with more ease than with the whole society to control it.

Each properly organized county society will receive a charter from the House of Delegates, and every member of the county society will also be a member of the State society. Ample provision is made for appeal to the House of Delegates and the Council for grievances sustained by action of the county society.

Our best aid and most hearty concurrence should be given the Board of Censors under the enlarged duties as Councillors. As peacemaker, or organizer and censor for their respective districts, they have arduous tasks before them, and as the success of this new movement depends largely upon how they do their work, all aid possible should be given them.

Many other features might be noted, and possibly may be in the future. At present it is the duty of the profession to organize. This is the key note to success. Without it the movement is a failure.

THE TREATMENT OF VENERIAL DISEASES.

Every physician of much experience has probably noted the evil results following the mistreatment of venerial

iseases. This should not be from igno-
ance of the etyology, symptoms and se-
uelae of these troubles, for they are
most exhaustively treated by the col-
ge professor and in the text books.
he facts are before us, though, in our
ery day practice, that these troubles
e not properly met and combated. We
id following neglected cases of syph-
is, a train of evils in skin eruptions,
e, ear and throat troubles, diseases of
e bones and joints, glandular disord-
s, loss of memory, weakened intellect,
c. Most of these troubles can be re-
ved under appropriate treatment, and
e large majority of them prevented
persistent treatment for some
onths after the disappearance of all
mptoms.

Neglected or mistreated gonorrhœal
ses present strictures, prostatic in-
mmation, cystitis, opthalmias and
any other troubles with which we are
ore or less familiar. It is not always
at these are amenable to treatment or
evented by our best efforts, still they
e more frequent than should occur.

The gynecologists tell us of the evil
fects of the uncured clap in the man
o, marrying, conveys the disease to
s wife. She, innocent of any wrong
the matter, ignorant of the difference
tween a simple leucorrheal and a spe-
ic vaginitis, neglects treatment and
ffers invalidism for years from me-
tis, salphingitis, etc., because her
sband was not cured of his impuri-
s before approaching her.

That this state is not all the fault of
e physician is acknowledged, but that
uch of it is is also certain. The treat-
ent is always tedious, especially so in
philitic troubles, ranging as it does,
er a period of two to three years, fre-
ently with but little trouble to the pa-
nt, and but few subjective symptoms.
is hard to impress the patient with
the importance of a long course of treatment or with the gravity of the situation. When the manifestations of the trouble are mild, the patient becomes careless, especially in the latter stages, and thinks it is only to secure additional fees that the doctor urges longer treatment, and finally abandons medicines altogether, only to reap the evils of his course in later years.

While the gonorrœal cases are not so long continued in their treatment or in the necessity for it, the patients are hard to control, given to excesses, and impatient in their desire to get well.

Both of these fall easy victims to the quack—the charlatan, the patent medicine vender, and the old root and herb imposter, with all the concomitant evils incident to mistreatment of the worst form. Perhaps the patient is, to a certain extent, excusable for this, for it is admitted that on account of the difficulties in the way of successfully treating these cases, many physicians refuse them altogether or go into the treatment in only a half-hearted way.

The treatment given in the large majority of these cases is correct as far as it goes. The mistreatment arises from a failure to properly impress the patient with the magnitude of his trouble, the evils arising from it, the chronic nature of the disease, and the importance of continuing treatment until cured. Though we may give all the medicines necessary, if we fail to impart the necessary instruction as to the evils of the trouble, we are derelict in a duty we owe to the patient.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

EDITORIAL NOTES.

CODE OF ETHICS NOW INOCUOUS.

For twenty-two years has been waged a foolish war among medical men, over the "Code of Ethics" of the American Medical Association. Almost every year has seen some attempt to modify that monstrous document, but with little or no result. The profession in New York has been split into two factions for years, and envy, hatred and malice have been allowed to grow and flourish there, about the silly question of "Code" or "No Code." The New Orleans meeting of the Association saw the death and burial of this old "Code," and the ceremonies attendant were joyous. The general committee which had the matter in charge presented a beautifully inocuous document "of a purely advisory nature," in which is set forth the "principles of medical ethics approved by the American Medical Association." Now let New York and every other State in the Union go ahead with the good work of organization until every reputable practitioner of medicine is a member of his local, State and national association.—*Cal. State Jour. of Medicine.*

UNIVERSITY EPIDEMICS.

The tragedy of Cornell, due to a polluted water supply, followed so closely by a similar, though fortunately less deadly epidemic of typhoid fever at Stanford University, should attract immediate and careful study at the hands of students of preventive medicine. For long it has been known that where many men from all sections are gathered together—as in military camps—typhoid fever and other diseases are to be carefully looked for and guarded against, yet that similar precautions should be taken in connection wit large gatherings at university center does not seem to have been recognize Where so many lives are placed in dar ger it would seem as though no amou of care or expense should be too muc to ask, that the health and the lives these young men and women may b properly safeguarded.

SECRETS IN MEDICINE.

The man does not live who has gor far enough in medicine to discover great secret who will not reveal it i preference to making a great fortur from it. The applause of the medic world is worth more to him, no matte how mercenary he may be or how poo than millions of dollars gained at th cost of violating the first principle professional honor. Therefore, it ma be repeated that the physician who pr fesses to have such a secret dare n submit it to the profession because cannot stand experiment.—*N. Y. Commercial Advertiser.*

We wish to solicit from our reader reports of unusual or interesting case too brief perhaps, for a completely wri ten paper, but suitable for recording u der "Clinical Notes." Many matters value to the profession can thus easi be recorded which otherwise will b neglected and never become availab for further reference. We wish ou pages to be utilized for whatever will b of benefit to the profession.

Modern pharmacy has given us rem dies that are new and valuable in th treatment of diseases and some that a not so successful. Doctor, let us hav some of your recent experiences.

The Carolina Medical Journal

COLLABORATORS.

H. T. Bahnson, M D., Salem, N. C.
. Howell Way, M. D., Waynesville, N. C.
. Allison Hodges, M D., Richmond, Va.
S. Westry Battle, M. D , Asheville, N. C.
Geo. G. Thomas, M. D., Wilmington, N. C.
. P. Munroe, M. D., Davidson, N. C.
Manning Simons, M. D., Charleston, S. C.
S. C. Baker, M. D , Sumter, S. C.
R. L. Payne, M. D., Norfolk, Va.
H. S. Lott, M. D., Winston, N. C.
J. W. Long, M. D., Salisbury, N. C.
H. A. Royster, M. D , Raleigh, N. C.
Albert Anderson, M. D., Wilson, N. C.
Francis L. Parker, M. D., Charleston, S. C.
Chas. W. Kollock, M. D., Charleston, S. C.
Davis Furman, M. D., Greenville, S. C.
F. Julian Carroll, Summerville, S. C.
Translation and Foreign Reviews, Richard H. Whitehead, M. D., Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.

Contributors for the Original Department of The Journal are received, with the understanding that they are contributed exclusively to this Journal.

Illustrations necessary to elucidate the text will be provided without expense to authors when suitable ink drawings or photographs are furnished.

Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

Primary Tuberculosis of the Tonsils.

By Richard H. Johnston, M. D., Assistant Surgeon and Pathologist to the Presbyterian Eye, Ear and Throat Charity Hospital, Baltimore.

Tubercular disease of the tonsils was practically unknown until 1893, when Schlenker reported two cases. Since Koch's discovery in 1881, pathologists had been busily engaged in studying tubercular infections in other parts and organs of the body with the result that localized disease had been found of frequent occurrence. Scientific research had proven that tuberculosis did not in every case involve the lungs and that an inherited predisposition or weakness in nearly every part of the system could become the nidus for the bacillus. These facts having been discovered, the treatment was greatly simplified and many patients, especially children, were rescued from incurable deformities or early graves.

Strange as it may seem, the palatal tonsils, standing at the very threshold of the respiratory system, and Luschka's tonsil, with its close relationship to the nose, had been almost neglected from a tubercular standpoint. It had been recognized that enlarged tonsils and tubercular glands of the neck were frequent occurrences, but the possibility of such an infection through the tonsils does not seem to have been considered for at least ten or twelve years after Koch's discovery. Quite a number of years before W. Meyer had called the attention of the medical profession to the presence of adenoids in the nasopharynx and the disastrous results that followed their non-removal. Bacteriological investigation had revealed the fact that, other things equal, children with hypertrophied tonsils and adenoids —for the two conditions nearly always go together—were more liable to fall victims to certain infectious diseases, such as diphtheria, scarlatina, acute tonsilitis, etc., than those with normal tonsils. It had been shown that enlarged tonsils formed a very favorable soil for streptococcus infection. Thus, Sena-

tor's disease was known to be due to a tonsillar or peritonsillar streptococcic infection giving rise to an acute phlegmon of the throat usually resulting in death from septicaemia. In view of all these facts, it is strange that pathologists had not turned their attention to the organs which had shown themselves so willing to take up other infections. The influence and dogmatism of Virchow probably had much to do with this seeming neglect of so important a subject. He expressed the opinion, which could have had no scientific basis, that the tonsils were protected from tuberculosis by a sort of immunity. But in spite of his tremendous power pathologically, two Germans, Schlenker and Strassman, began very quietly to examine into the facts and in 1893 published their first articles and completely upset the theory of the renowned Virchow. They established beyond a doubt that the tonsils, like other organs of the body, are susceptible to infection by the tubercle bacillus. The ice having been broken, investigators all over the world took up the work begun by the two Germans, and, as a result, great advances in the pathology of the tonsils have been made, until today primary and secondary tuberculosis of the tonsils are well established facts. The writer knows that the possibility of primary infection of the tonsil has been denied by some excellent authorities, who claim that such infection must be secondary. "Seeing is believing," and it has been his good fortune to see in practice a case which, from all symptoms and signs, must be recorded as primary tonsillar tuberculosis. Before attempting to answer the arguments of those who deny the existence of the disease per se, he wishes to report in detail the above case. It was followed day by day and not a single phase of the disease escaped detection.

L. E., 29 years old, box maker, weight 136 pounds. His mother died at the age of 68 with "heart disease." His father is living and healthy. No brothers or sisters dead. He does not recall a single case of tuberculosis in the family. The patient suffered from all the diseases incident to childhood. At the age of twenty-four he had smallpox, which left his face badly marked. He has never had syphilis. He married seven years ago and has one child five years old, apparently sound in every way. The patient came to the throat department of the Presbyterian hospital November 12, 1901. He complained of a sort throat of two weeks' duration. His general health was good. He worked in a box factory where he inhaled a great deal of dust and thought this had irritated his throat. There was no cough, no expectoration, no fever, no night sweats, no loss of weight. He simply wished treatment for a mild sore throat which pained him on swallowing. In appearance the patient was slender and looked well except for a slight pallor of the skin. There did not seem to be anaemia, as indicated by the mucous membranes. On examining the throat, both tonsils were seen to be greatly hypertrophied. The tonsillar tissue hung down in lobulated masses, the crypts being clearly visible between. Both tonsils reminded one of bunches of grapes. At the lower part of the left tonsil was an ulcer about 10 mm wide, covered with a whitish exudate and sluggish. The edges were sinuous and undermined. The surrounding tissues were not much reddened. The pharynx was congested. There was a chronic inflammation of the nasopharynx. The lingual tonsil was hypertrophied. The larynx was normal except for a slight pallor. There was no hoarseness. The cervical glands or

both sides were enlarged. As there were no signs or symptoms of tuberculosis, a probable diagnosis of syphilis was made. Applications of chromic acid to the ulcer and the mixed treatment internally were prescribed. This treatment was continued for three weeks with no benefit. The patient was seen every other day and the throat carefully watched. Scrapings from the ulcer were stained and showed a few scattered tubercle bacilli. Two weeks after the first visit to the hospital, the arytenoid cartilages seemed slightly swollen, but the physical condition was no worse. The patient continued at his work and was bright and cheerful. A small piece of tissue was now removed from the base of the ulcer for microscopical examination. The patient was requested to bring his sputum, but he denied expectorating. He was questioned as to loss of weight, but always with a negative result. The lungs were repeatedly examined, but at no time were there physical signs of pulmonary involvement. In the early part of December the patient began to show signs of physical failing. The examination of the tissue revealed the presence of tubercle bacilli and there was no longer any doubt as to the diagnosis. He was given creosote and advised to give up his work and remain in the open air as much as possible. This he declared himself unable to do, as he had to support his family. By this time the ulcer was growing rapidly—the arytenoids were distinctly infiltrated and pale and the vocal cords reddened and swollen, producing hoarseness. He was coughing some, was beginning to lose weight, and to have fever and night sweats. A small ulcer now appeared in the pharynx and gradually became larger. Both ulcers were surrounded by a few whitish elevations—miliary tubercles. Lactic acid in increasing strength was applied vigorously to the ulcers without the slightest effect. The course of the patient was now rapidly downward. The tonsils, soft palate, pharynx and uvula were covered with miliary tuberculosis and looked as if they had been splashed with whitewash. There was still no expectoration. At this time all the organs of the body were undoubtedly involved in the tubercular process. The patient was dying of acute miliary tuberculosis. The glands in the neck were so large as to suggest a typical case of Hodgkin's disease. Before the death of the patient, which occurred the latter part of January, just three months after the first symptom, the throat was a mass of ulceration. As can be imagined, the condition of the patient was truly a pitiful one. Unfortunately, no post-mortem was obtained, and this one fact is the only weak point in the chain of evidence pointing to primary infection. The tissue removed from the base of the ulcer was hardened in alcohol and examined for tubercular lesions and for bacilli. Sections were stained in haematoxylon and eosin, and revealed the following points, viz.: The squamous epithelium lining the normal tonsil was nowhere to be seen. In its place was an area densely infiltrated with leucocytes, with entire disappearance of normal tonsil tissue. Just internal to the ulcer was a band of connective tissue, newly formed, showing an effort on the part of the organ to circumscribe the disease. At two places there were small patches of normal tisue. Scattered through the specimen were foci of leucocytes. Only a few giant cells and epithelial cells were found. At one point, distinctly circumscribed, there was quite an extensive area of caseation. The sections examined for bacilli were stained in carbol-fuchsin for 24

hours, and in Gabbet's methylene blue for a few minutes. The bacilli were present in abundance, which is rather unusual in tuberculosis of the tonsils. The above case was very interesting for several reasons. In the first place, the entire absence of all symptoms of tubercular trouble was calculated to mislead one into the diagnosis of syphilis. Secondly, the enlargement of all the servical glands, which indicated a great effort on the part of nature to prevent the spread of the infection. Thirdly, the sudden lighting up of a malignant tubercular disease which simply saturatel the entire system from a condition producing no symptoms and which might be described as a latent tuberculosis. Fourthly, the important part played by the lymphatics in the spread of the infection. Fifthly, certain phases of the disease which utterly refute the arguments of those who claim that ulceration never occurs in tonsillar infection, and that it must be secondary and due to the expectoration. The writer is aware of the fact that the possibility of primary tonsillar tuberculosis is denied by some eminent authorities. Thus, Schlenker and Strassman, from their investigations, concluded that the infection of the tonsils is always secondary and caused by sputum. Krouckmann agrees with them. On the other hand, authorities are not wanting who have proved to their own satisfaction that primary infection does occur. From experiments such men as Dievlafoy, Tusseau and Baumgarten must be placed in the last category. Sacaze has recorded an interesting case of apparent primary infection. The appearance of the diseased organs corresponded to the picture of a follicular angina, and in the caseous masses from the crypts tubercle bacilli were found. Scheibner, who is a firm believer in primary infection, thinks that tuberculous dust at times lodges on or around the tonsils. The compression incident to swallowing tends to empty the crypts. After the act of swallowing, it is probable that the crypts are able to take up fluid substances upon the tonsils by suction. In this way bacilli inhaled in dust might enter the crypts. He examined thirty-two cases of tubercular and non-tubercular patients and found two which he regarded as of primary origin. Labe and Sirigue distinguished between primary and secondary infection. Friedman, in a series of 150 tonsils, found four which were primarily infected, since the most careful examination revealed foci in no other part of the body. He believes that in cervical gland tuberculosis, the tonsil represents the port of entry of the bacilli. Dmochowski once found tubercle bacilli in the lymphatic vessels leading to the cervical glands. Cases of primary infection have also been reported by Ruge, Piffl, Uhlmann, Baup, and others. It does not seem necessary to add to the above list in trying to establish the possiiblity and probability of primary infection of the tonsils. Reasoning from analogy, it is strange that the disease is not seen oftener. When tonsils are hypertrophied it would seem an easy matter for the bacilli to gain entrance into the system. Histologically the tonsils are nothing more nor less than lymphoid tissue containing a number of well defined lymph nodes. The whole organ is surrounded by a connective tissue capsule which is covered with squamous epithelium.

Dipping down into the tonsillar tissue are the so-called crypts or cavities lined with epithelium. In perfectly normal tonsils the epithelium of the crypts shows often extensive degenerative changes resulting mainly in the formation of variously shaped, communicat-

ng spaces filled with leucocytes and ymphocytes. In hypertrophy of the onsils there is increase of the elements, isually in children a cellular hyperlasia r great increase of lymph cells. As ge advances there is liable to be an in-rease of connective tissues, as Goodale as so ably demonstrated. Thus it can e seen that epithelial degeneration is onstantly going on in the tonsil. This egeneration in a diseased tonsil un-loubtedly plays an important part in in-ections of all kinds, for where the ton-ils are chronically inflamed the resist-ng power must be lessened and all oxic influences are much more liable o gain entrance into the general sys-em. Primary or secondary infection ccurs always in hypertropied tonsils, vhich means that healthy tonsils are ble to rid themselves of the tubercle acillus. During the past winter the vriter has had an opportunity to ex-mine a large number of hypertrophied onsils for tubercular lesions. The ton-ils were removed from children and dults, all of whom were apparently ree from tubercular taint. In a series f sixty cases, in one only could the resence of giant cells be demonstrated. ubercle bacilli were not found. The ase reported above seems unique in he formation of a large ulcer and from he abundance of bacilli found. From he symptoms and the results of micro-copical examination, the writer re-ards it as a case of undoubted pri-ary tuberculosis of the tonsil, and as uch adds it to the small number of ases recorded.

212 West Madison street.

BIBLIOGRAPHY.

1. Schlenker, Untersuchungen, uber ie Tuberkulose der Halsdrusen, etc., irchow's Archives, Bd. CXXXIV, 893.

2. Strassman, Uber Tuberkulose der Tonsillen, Virchow's Archives, Bd. XCVI, S, 319.

3. Dmochowski, Uber Sekundare Erkrankung der Mandeln und der Balgdrusen an der Zungenwurzel bei Schwindsuchtigen, Zeigler's Beit zur, Pathol. Anat., Bd. X. S. 481.

4. Dieulafoy, Tuberculose Larvee des trois Amygdales, Semaine Medicale, P. 199, 1895.

5. Cornil, Sur le Tuberculose Larvee des Trois Amygdales, Sem. Med., P. 223, 1895.

6. Kruchman, Uber lie Beziehungen der Tuberculose der Halslymphdrusen zu der Tonsillar, Virchow Arch., Bd. CXXXVIII, Heft. 3.

7. Tusseau, Le l'etiologie de la tuberculose des amygdales et de son traitment, Lyon Medical No. 16, 1894.

8. Baumgarten, Uber die Ubertragbarkeit der Tuberculose durch die Nahrung und uber Abschwachen der, etc. Centralbl. fur klin. Med. No. 2, Page 25, 1884.

9. Sacaze, Amygdalite lacnaire casieuse de nature tuberculeuse, Arch. gen. de therapie, December, 1893.

10. Scheibber, Are the Tonsils Frequently a Port of Entry for the Tubercle Bacillus. Trans. Deutsch Medicine Wochenschrift, May 25, 1899.

11. Labbe, Levi-Siugue, Tuberculosis of the Tonsils. Trans. Gaz. des Hospitaux, February 17, 1900.

12. Friedman, Beitrage zur path. Anat, und zur allgem. Path Bd. XXVIII. No. 1.

13. Strassman, Virchow. Arch. XCVI. Page 319.

14. Ruge, Virchow's. Arch CXLIV.

15. Kafeman, Bresgen's Samml, II, H. 4-5.

16. Stohr, Virchow Arch. XCVIII.

17. Sucharek, Zeigler's Beitage, 1888.

18. Lexer, Arch. of klin chir. Bd. LIV.

19. M. Schmidt, Die Krankh der Oberen Luftwege, 1899.

20. Piffl, Zeitschrift fur Heilkunde, August 1, 1899.

21. Lewin, Archives f. Laring und Rhin., 1899, IX H. 3.

22. F. Wex. Arch. of Octol., XXIX 6.

23. Uhlman, Med. News, January 26, 1901.

24. Durck. Erzeb. der Allgem. Path. und Path. Anat. Lucarsch, Ostertag, Bd. II, 1893.

25. Baup. Bull de Laring, etc. March 30, 1901.

26. Martuscelli, Tuberculosi della Tonsilla di Luschka, Arch. Ital. di Laring, October, 1902.

27. Moure, Tubere. of the Tonsils, 20th Century Prac. Med. V. 6, P. 248.

28. S. Yankelevitz, La. Sem. Med. No. 1, January, 1902.

Treatment of Typhoid Fever.*

By L. F. Griffith, M. D., Salem, Oregon.

The treatment of typhoid or enteric fever is conveniently considered under the following heads: Prophylaxis, general management, diet, special forms of treatment, treatment of symptoms and complications, management of convalescence.

Prophylaxis.—Typhoid is usually contracted from drinking water, which has become polluted by discharges from other typhoid cases, and in the presence of an epidemic all drinking water should be boiled. Other sources of infection, such as milk diluted with water containing typhoid bacilli, green vegetables eaten raw, that have been grown on soil fertilized by infected sewage, or washed with poluted water, oysters plumped or fatted with like impure water, food contaminated by flies that have had access to typhoid discharges, bacilli inhaled in dust and swallowed with the saliva, may at times be the source of the infection. But in the large majority of cases the water supply is directly at fault, and the prevalence of typhoid in cities is in direct proportion to the purity of their water supply and the efficiency of their sewerage and drainage.

It is the duty of every physician, when called to a case of typhoid fever, to use every available means to determine the source of the infection, that measures may be instituted to protect others from contamination. He should also see that urine and fecal discharges are thoroughly disinfected. General measures of sanitation belong to the domain of public hygiene, but much also remains to be done by the private practitioner. Each individual case should be considered as a focus of infection, and should be handled accordingly.

The following measures should be carried out:

The stools and urine should be disinfected with lime—either with milk of lime or the chlorated lime, the latter being used in the strength of six ounces to one gallon of water. Corrosive sublimate 1-500, carbolic acid 1-20, may be used, but are not as efficient. Formaldehyde in 8 per cent. solution is very effective but more expensive.

A half pint of the solution selected should be placed in the bed pan before it is used and enough added to cover the stool. The disinfectant and stool should be thoroughly mixed and allowed to stand at least an hour before being thrown in the water closet. Vomited matter and sputa should be disinfected in a similar way.

*Read before Marion County Medical Society.

After handling the bed pan, or using he syringe or rectal thermometer, or fter bathing the patient, nurses should horoughly cleanse their hands in soap nd water and should disinfect them in ichloride 1-100.

Thermometers, rectal tubes and yringes and all utensils coming in con- act with the patient should be thor- oughly cleansed and disinfected.

Bed and body linen should be chang- d daily and soaked for several hours in -20 carbolic and then boiled for half n hour.

After recovery or death of the pa- ient, the mattress and bedding should e disinfected with steam heat or fumi- ated with formalin.

General Management.—There is no isease in which careful nursing is as mportant as in typhoid fever. This nd a properly regulated diet are the ssentials in a large majority of cases. t the beginning of the illness the phy- ician should give the nurse detailed nd specific instructions—preferably in vriting—as to the general management f the case, and should require a writ- en report daily as to the temperature, ulse and respiration, the amount of ourishment, the number and character f the stools, and all other clinical data f importance.

The patient should be kept in bed rom the time the disease is suspected ntil convalescence is thoroughly es- ablished. The use of the bed pan and rinal should be insisted upon from he start—the recumbent posture being rictly and continuously maintained. f taken sick a long distance from home e should not be permitted to take the ourney unless absolutely necessary to ecure proper care.

The sick room should be roomy and ell ventilated, with all superfluous furniture and decorations removed. The bed—preferably a single one—should not be too soft or too hard. A woven wire mattress covered with a good hair mattress and a double blanket makes the most suitable bed. A rubber sheet should be spread beneath the sheet, which should be kept smooth and free from wrinkles. The patient's position should be changed frequently, and the prominent parts of the back should be bathed once or twice a day with dilute alcohol to prevent the possible formation of bed sores. A careful toilet of the mouth should be made regularly, as it adds to the comfort of the patient and prevents the development of stomatitis, parotitis and middle ear disease.

Dict.—It is essential that the diet be liquid, easily digested, and leave but a small amount of residue in the canal. Some even advocate that patients do quite as well, if not better, on water alone. Certainly they are ofter injured by too much, or improper food. Milk is generally conceded to be the best food and, if properly administered, is all that is needed for the majority of cases. About three pints should be given to an adult in the twenty-four hours. It is best diluted with water, lime water, vichy or aerated waters. The stools should be watched for curds, and if they appear, the amount should be lessened or the milk peptonized. Buttermilk may often be substituted when milk is distasteful, or the diet may be varied with chicken or mutton broth, beef juice, or albumin water, made by straining whites of egg through cloth, adding an equal quantity of water and flavoring. If diarrhea be present, animal broths often have a tendency to increase it. The nourishment should be administered as often as every three hours. In severe cases, in which only

small quantities are borne by the stomach, the intervals of feeding must be shortened to two hours.

Water should be given often and freely, whether the patient asks for it or not. It not only quenches the thirst but facilitates elimination and prevents constipation. Lemonade may be taken, or moderate quantities of weak tea, coffee or cocoa may be permitted once a day.

Alcohol should not be given as a matter of routine. Children and young person seldom require it, but those who have been in the habit of using it excessively will require it throughout the course of the fever. In other cases, when great weakness develops, or particularly when the fever is high, with marked nervous systems, low delirium, restlessness, *subsultus tendinum*, dry tongue and marked meteroism, alcohol may be needed in large quantities, as much as eight to ten ounces being given in the twenty-four hours.

Special Forms of Treatment.—Hydrotherapy is of first importance. The technic of its application is varied. The full bath, as practiced by the late Dr. Brand, of Stettin, is probably the most effective. But in private practice facilities are often lacking and the method has to be modified according to the conveniencies and help available. The bed bath, the cold pack, sponging and large enemas of cool water, are, in the order of their enumeration, efficient in combating hyperpyrexia—the details of their application being familiar to all of us. By sufficient application of cold water not only is the temperature controlled, but the circulation is improved, the respiration is rendered deeper and less frequent, the danger of pulmonary congestion is lessened, and the development of nervous symptoms is usually prevented. Previous to the introduction of hydrotherapy the death rate in hospitals ranged from 17 to 25 per cent. Under the Brand treatment is has been reduced to from 5 to 6 per cent. In the Spanish-American war it was 7 per cent.

Medical Treatment.—Ordinary, uncomplicated cases of typhoid require little or no medication. The treatment of special symptoms and complications are treated of elsewhere. The fever, which used to be the chief indication for medication, is best combated by hydrotherapy, as has already been stated. Phenacetin, antipyrine, acetanilid, guaiacol and quinine are still used to a limited extent as adjuvants, but their employment must be guarded on account of their depressant action.

Antiseptic and Eliminative Treatment.—This includes the administration of purgatives, especially during the first week of the disease; the administration of cold water in abundance, and the giving of some of the various intestinal antiseptics.

The use of purgatives in typhoid is an old practice, their systematic and continuous use throughout the course of the disease having been practiced in the early part of the last century—very satisfactory results being claimed. In recent years it has been generally believed to be dangerous to use them after the first week or ten days of the fever, on account of the liability of provoking hemorrhage. Dr. Bass, of Columbia, Miss., has just recently published a report of thirty-two cases treated with castor oil, exclusive of other remedies, except in a few cases in which other remedies were given to meet some special symptom. Thirteen of the cases were given a dose of oil every twenty-four hours, and nineteen received a dose every twelve hours, the dose being two to four drachms during the first

veek, and one to two drachms for the est of the time. There were no deaths nd one relapse with hemorrhage dur- ng the second attack. In all the other ases the temperature reached normal n from fourteen to twenty-one days rom the beginning of the attack, and he temperature seldom exceeded 102 legrees.

Dr. Wm. H. Thompson, of New York, gives calomel, 5 gr. Co. Jalap owder, 35 gr., every night until the fteenth day as a routine practice at he Roosevelt Hospital.

The intestinal antiseptics recommend- d are numerous, the more prominent eing salol, naphthalin, napthol, benzo- apthol, bismuth salicylate, thymol and hlorine water.

The fact that the typhoid bacilli mul- iply in the intestinal walls, the mesen- eric glands, the spleen, and, as recently eems to have been demonstrated, in he blood, makes it unreasonable to uppose that agents which are only ac- ve within the intestinal canal will ma- erially influence the course of the dis- ase. The only virtues they possess epend upon their ability to prevent acterial growth and the development f toxines in the intestinal contents and econdary infections in the typhoid isons.

I believe it is a mistake to give any nedicine as a routine practice in ty- hoid. Dr. Hobart A. Hare, of Phila- elphia, in a paper read before the New York Academy of Medicine, Oc- ober 21st, asked if it would not be a ood motto, if in every case of typhoid ever the bed was labeled, "let the pa- ent get well." In the early stages there usually constipation, and a purgative indicated. Personally, I prefer calo- el, as it not only clears the bowels but antiseptic. Then, if the diet be prop- rly managed, there is seldom much need of the antiseptics. These agents are nearly all eliminated by the kidneys, which are already overcrowded with the work of eliminating the toxic products of the disease, and I am sure I have seen salol do harm to these organs when no more than fifteen grains in the twenty-four hours were being taken.

Chlorine water is the only one for which general antiseptic properties is claimed. It has been principally advocated by Drs. Burney, Yeo and R. W. Wilcox, and if employed needs to be freshly prepared.

Treatment of Symptoms and Complications.—Headache may be severe early in the disease, and if not relieved by the purgative usually administered at this stage, the room should be darkened and a small dose of phenacetin or antipyrin administered. In some cases a small dose of opium acts better, and is often well combined with bromide of soda.

Insomnia, though nearly always present to a greater or lesser degree, seldom requires direct treatment. If persistent and troublesome, Dovers powder may be given at bed time with benefit, or a small dose of chloral and bromide of soda may be administered.

Restlessness, delirium and somnolence are best combated by hydrotherapy. Delirium is sometimes so active as to materially interfere with the proper care of the patient. It is usually best controlled with morphine sulphate, though hyoscin hydrobromate may be superior in some cases. Delirious patients should never be left alone.

Vomiting occurring early is unimportant and is seldom persistent. Minute doses of calomel frequently repeated are often serviceable. Later in the disease vomiting may prove more serious, and may make it necessary to give the organ complete rest—giving the nour-

ishment per rectum. It is usually due to errors of diet, and, these being corrected, the vomiting subsides. A mustard plaster to the epigrastrium often acts well.

Tympanites is sometimes excessive; large enemas frequently administered will usually improve the condition, but care should be exercised not to use too much force. They should be given slowly, and the bag not more than 20 inches above the patient. Turpentine stupes may be applied to the abdomen, and turpentine in emulsion may be given internally, or some one of the intestinal antiseptics may be tried. If not too late in the fever, a dose of calomel or castor oil is the best measure.

Diarrhœa.—A moderate amount of diarrhea is not objectionable, and if the diet be proper and not excessive, there is seldom a troublesome looseness of the bowels. If, however, this symptom becomes prominent resort may be had to intestinal antiseptics; bismuth, and usually some opium, will be required.

Constipation is corrected during the first two weeks by laxatives. Later enemas must be depended upon. Intestinal hemorrhage is one of the most frequent and severe complications of this disease. The principal indication is to keep the patient absolutely quiet. This is best secured by morphine hypodermically administered, which also controls the peristalsis. An ice bag may be applied to the groin, and if the hemorrhage be profuse and collapse threatened, the foot of the bed should be raised, stimulants administered and 8 to 16 ounces normal salt solution given by hypodermoclysis. The acetate of lead, sulphate of iron, turpentine and ergot, which are sometimes given, are of doubtful utility.

Perforation and resulting peritonitis can only be relieved by laparotomy. The most favorable time for operating is supposed to be between twelve and twenty-four hours after perforation. About thirty per cent. of patients operated upon at this time recover.

Specific Treatment.—Brilliant results have been claimed by some in a limited number of cases treated with antityphoid serum. The well established use of antitoxin in diphtheria leads us to hope for similar favorable results from anti-typhoid serum, but as yet reports are too meagre for any definite conclusions concerning it.

Management of Convalescence.—Patients are usually given solid food too soon. Recrudescence of fever can usually be traced to some indiscretion of this sort. The amount of liquid nourishment may be gradually increased, and may be quite varied, but no solid food should be given until ten days after the temperature has been normal.

SELECTED PAPERS.

A Review of the Para-Typhoid Infections.

By George E. McLaughlin, M. D , Pathologist and Bacteriologist to Christ Hospital, Jersey City.

The terms *para-typhoid* and *paracolon* were proposed by Gilbert, in 1893, to designate the intermediary bacilli of the typhoid-colon group. They include bacillus enteritidis, bacillus psittacosis, bacillus paratyphosus, bacillus cholera suis, bacillus typhi-murium, and bacillus icteroides.

The intermediates are mostly pathogenic for man, and it is easy to distinguish them as a group from bacillus coli communis, on the one hand, and

om bacillus typhosus on the other. he main points of difference are shown elow.

When, however, the intermediates are ore closely studied they are found to ffer to a considerable extent among emselves, both culturally and in their gglutinating interactions. As regards ose which are pathogenic for man we id them clinically divided into three roups according to the symptoms proiced.

	Bacillus Coli Com.	Intermediates.	Bacillus Typhosus.
agulation of milk	+	—	—
dol produced	+	—	—
erments lactose with gas	+	—	—
erments glucose with gas	+	+	—
gglutinates typhoid serum	—	—	+

Group A.—The meat poisoning group Gærtner's bacillus enteritidis). Sudn onset soon after ingestion of meat. he symptoms at first are those of toxin isoning followed by invasion of the stem with the bacilli. The duration the illness is 4 or 5 days, after which ick recovery occurs. In a few cases ath took place in two or three days.

Group B.—The pneumonic or psittasis group. This has been described several French authors, Archard and nsaude among others, and is ascribed them to a bacillus first isolated by ocard from a parrot supposed to have en the original cause of an epidemic.

Group C.—Those causing typhoide symptoms. So far twenty or more ses have been reported in whose od, urine, stools or some complicatg inflammatory process paratyphoid cilli were found. Clinically, the dise resembles typhoid fever, but the od of the patients does not give the idal reaction with the bacillus typhos. Here a question naturally suggests itself: Have not some of our cases presenting the clinical features of typhoid fever with negative Widal reactions been in reality paratyphoid infection? It was, no doubt, this thought, that prompted the investigation into the matter by bacteriologists, and which has advanced our knowledge of the paratyphoid infections to the status it now occupies.

SOME REPORTED CASES.

Archard and Bensaude, in 1896, described the first important cases of infection by this organism under the title of "paratyphoid infections." Their cases were:

Case 1. A case clinically resembling typhoid fever in which there was an intercurrent relapse followed by a femoral plebitis. During the course of the patient's illness the writers twice isolated from the urine, which had become purulent, a so-called paratyphoid bacillus which was identical with the one found in the second case. A blood culture made at the height of the fever proved negative.

Cas5 2 was that of an infant, 7 months old, who, after a febrile illness of not quite three weeks' duration, had a suppuration of the right sterno-clavicular joint, from the pus of which an organism resembling that found in Case I. was isolated. They regarded these organisms as closely related to the bacillus psittacosis, a microbe found in a diarrheal disease of parrots and communicable to man, producing a broncho-

pneumonia with typhoid fever symptoms.

The next case to be reported was that of Widal and Nobecourt in 1897. A phtisical patient, after being three weeks in the ward, developed an abscess in the neck near the esophagus, with slight constitutional symptoms. From the pus a paracolon bacillus was isolated. This case is considerd by some authors as a sequel of typhoid fevers, but the patient at the time of observation was 31 years old and the attack of typhoid fever occurred at the age of 9. Widal and Nobecourt state that they are opposed to the term "paratyphoid" because the organisms resemble more closely the colon than the typhoid bacillus. They cite some observations of Tavel and Lanz, who found similar organisms in cases of peritonitis, and they mention a case of suppuration of the spleen due to a related organism.

In 1898 Gwyn reported the case of a man who suffered from a typical case of typhoid fever with intestinal hemorrhages. The Widal reaction was absent. Three and one-half weeks after the onset of the disease Gwyn isolated from the blood a paracolon bacillus.

Malherbe and Mounier isolated a paracolon bacillus from a case of inflammation of the penis, with induration of the corpus cavernosum.

Cushing's study is the most complete among the various papers on the subject. The history of his case was in brief the following: A man, 27 years of age, suffered for ten weeks with an attack of fever described as typhoid. He had a relapse beginning with an epistaxis. During convalescence he developed two foci of costochrondral osteomyelitis. One of the foci disappeared but the other broke open six months later and discharged pus. Since that time he had a sinus at the level of the fifth rib at the edge of the sternum. From this focus nine months after the onset of the fever, Cushing obtained the paracolon bacillus in pure culture. The Widal reaction was negative. Cushing also refers to the report of a case by Blumer in which the latter stated that he found the bacillus coli communis in a post-typhoidal rib abscess. As the organism produced alkali in milk and, therefore, probably did not ferment lactose, Cushing believed that it was probably a member of the group of bacilli under discussion.

Schottmuller, in 1900, reported a case of fever lasting twelve days, beginning with reddening of the conjunctivæ and mucous membrane. A roseola and an enlarged spleen were present. The Widal reaction was absent. The blood culture made at the height of the attack yielded a "typhoid-like" bacillus. Later he reported five cases occurring during a small epidemic of typhoid fever, in all of which the Widal reaction was negative and from the blood of each of which he succeeded in isolating "typhoid-like" bacilli. The clinical picture resembled typhoid fever. All of the patients recovered; there being no complications and no relapses [So the author states; but his second case certainly must be looked upon as having had a slight relapse.] The report of only one Widal reaction is made. The blood of each of the patients gave a positive reaction with the organism isolated from the case and with some of these isolated from the other cases in high dilutions. In the sixth case he made the diagnosis on the basis of the serum reaction alone. In five of these seven cases the duration was respectively 12, 19, 17, 16 and 13 days. In one the onset was characterized by headache and sneezing; in three by reddening of the face, conjunctivæ and the

asal mucuous membrane. In four of he cases there was constipation; in one iarrhea. In one case roseola devel- ped by the fourth day. All the cases nded by lysis.

Kurth, in a series of sixty-two cases f typhoid fever, found five which did ot give a positive Widal reaction. 'rom the urine of one case and from ie stools of another he isolated a bacil- is probably belonging to the group nder discussion, with which a positive eaction was obtained with the serum f four of the cases. The fifth was the ase with the bacillus in the urine. No erum was obtained from this case. 'hese cases lasted respectively, three eeks, fifteen days, twelve days, eigh- en days and two weeks. All had iarrhea. In one case roseola was resent on the sixth day, and in one on ie fifth day. In one case the temper- ure dropped by distinct crisis. Kurth emarks that the clinical aspect of these ases was like the old cases described s gastric fever.

In 1902 Brion and Kayser reported a ase of a young girl, in whom they iso- ted a paracolon bacillus from the lood, urine, feces and rose spots. The irl entered the hospital with a gon- rrhea, loss of appetite, abdominal pain, onstipation and slight fever. The pleen was palpable. After two weeks ie was discharged but returned in hree days with a renewal of the former mptoms, a palpable spleen and rose- a. The patient had a second relapse, nd during convalescence a left femoral hrombosis. Her fever lasted nine ays, fifteen days and sixteen days. fter the first relapse the fever fell by risis, and after the second by quick sis (three days).

Coleman and Buxton report the next ase from Bellevue Hospital. It was hat of a colored girl, of twenty-eight years, who was taken with a chill, fever, anorexia, vomiting, subsequent epitaxis, severe headache and slight diarrhea. Later the spleen was palpable and abdominal tenderness and constipation developed. The fever broke by crisis on the fourteenth day, and after the critical fall showed exacerbations and remissions for another week, when it remained normal. The Widal reaction was negative. Blood taken from the arm on two occasions gave the paracolon bacillus.

Next, Libman describes a case which was probably one of typhoid fever in which a subsequent paracolon infection occurred. He isolated from the patient's blood, from the contents of the gall-bladder, and from the urine during life a paracolon bacillus. The patient's serum agglutinated this bacillus, but likewise agglutinated the bacillus typhosus. Clinically, the case resembled that of a cholecytitis or liver abscess, with negative Widal at first, which later became positive in high dilutions. No typhoid bacilli were found. The case terminated fatally and furnished the first case of a paracolon infection which came to necropsy. At the necropsy healed ulcers in the ileum, as well as ulcers showing a reparative process, were found. Libman began his article by giving some histories of past cases, and I am much indebted to him for this.

Johnson reports four cases of paratyphoid fever from Johns Hopkins Hospital.

Hewlett describes a case from the New York Hospital in which cultivation of the paracolon bacillus was successful.

Longcope reports two cases from the Pennsylvania Hospital, Philadelphia. One case with necropsy, and with isolation of the paracolon bacillus in both cases.

Analysis of Cases—The disease is reported from three cities of the United States, three cities of Germany, in Paris, and in the Philippine Islands. The largest number of cases occurred during the months of July to November inclusive, and none has been reported in December, January or February. The ages range from 7 months to 60 years, and three-fourths of the cases were young adults. The duration of the disease was twelve to eighty-four days.

Brion and Kayser's case well illustrates the remarkably wide distribution of the organism throughout the body. The paracolon bacillus in their case was isolated from the blood, urine, feces, vagina and rose spots. This case with the two others were the only ones which suffered from relapse following the primary attack. The patient here referred to had enlarged spleen, rose spots and the diazo-reaction, all going to complete the clinical picture of typhoid fever; yet the Widal reaction was negative. The bacillus they isolated reacted in dilutions of 1-1000 with the patient's blood, and was identical with the paracolon bacillus of Schottmuller's cases.

From a study of the cases so far reported it is evident that they represent practically the same affection caused by a bacillus or group of bacilli which differ materially from the colon and typhoid bacilli, but which have a close relation to the enteritidis group.

Morbid Anatomy.—The morbid anatomy also stamps this disease as different from typhoid fever. Here, as Longcope says, "The absence not only of ulcers, but even of marked microscopic lesions in the intestine, and the normal size of the mesenteric lymph glands without endothelial proliferation either in them or in the spleen, serve to stamp this condition as one totally different from typhoid fever.

Clinical Aspect.—Clinically, some cases so closely resemble typhoid fever as to render it impossible to diagnosticate them from cases of the latter affection, but typical cases of paratyphoid fever will usually present some distinctive features that will at least arouse suspicion of their true nature.

Dr. Brill, in his paper before the New York State Medical Association at its last meeting, formulated a list of certain differences between these affections which have been noticed by many observers:

"The incubation period of a paratyphoid fever is shorter than a true typhoid.

"The week of malaise is replaced by three or four days of discomfort, and then instead of a gradual step-like rise of temperature, there is usually a rather sudden development up to 104 degrees F., or even higher.

"The sensorium is prone to be dulled than in true typhoid and this apathy comes on earlier in the illness.

"The look of pain in the face is usually greater than in true typhoid, and headache is more complained of.

"Constipation rather than diarrhea is a prominent feature.

"Paratyphoid fevers are, as a rule, shorter in their course, there being frequently a crisis followed by a more satisfactory convalescence.

"In paratyphoid no sordes were observed, and emaciation was more extreme in typhoid fever than in the disease."

Bacteriological Diagnosis.—The paratyphoid bacillus, similarly to the typhoid bacillus, can be found early in the disease by cultures from the blood. This procedure has been of value in typhoid fever where an early Widal reaction was negative, and the clinical phenomena was not characteristic, and

is of equal value in paratyphoid fever. In some cases, as I have shown, the aratyphoid bacillus was cultivated rom the urine or feces and a diagnosis ıade by such bacilli being agglutinated y the patient's blood. If the bacillus annot be found in the blood, feces, rine or some lesion of the patient, the iagnosis is justified if the blood agglunates a paratyphoid bacillus in high ilution and does not agglutinate the yphoid bacillus or agglutinates it only in very low dilution. A reaction with low dilution is valueless as it may be obtained in typhoid fever and possibly other diseases.

In conclusion, I would impress upon you that the paratyphoid bacillus is capable of producing a fatal infection distinct from typhoid fever. Also that every instance of a negative Widal reaction is not due to infection with this bacillus.

NEWER MATERIA MEDICA.

ORIGINAL COMMUNICATION.

espiratory Tract—Affections, Symptoms and Treatment.

By Dr. Arthur B. Smith, Springfield, O

The average physician is frequently exed in finding a condition which rests his best efforts to bring about a ure. This holds good in almost every sease at some time or other, but parcularly in affections of the respiratory act, where there may be a great vari-y of symptoms in several cases of the me disease.

Almost every physician has some faorite prescription for coughs, bronchi-s, laryngitis, etc., which he uses until ddenly it seems to lose its efficacy—hy, no one knows. Then another rem-y takes its place until it, too, fails to ve the desired result. It is rarely that e finds a cough remedy which will be nsistently good in the majority of ses. Theoretically there appears to be well founded objection to the use of ugh syrups in general, but nevertheless there are times when nothing else ves satisfaction; therefore, the physian pins his faith to that remedy from hich he and his patients derive the most good. It is not always easy to find such a remedy, but when it is once found, it is equally difficult to dispense with, and often the physician is almost compelled to resort to a routine treatment. In such cases, of course, he wants the best.

There are constantly being placed on the market new formulas for affections of the air passages. Some of these formulas are of undoubted benefit in some cases, but usually it will be found that the results are far from satisfactory. Many of them cannot be taken when there is any gastric complication, as is sometimes the case, because of consequent nausea and vomiting. Others seem almost invariably to act as cardiac depressions and are highly objectionable for that reason. With the advent of heroin, however, these disagreeable features have, to a great extent, been avoided. Heroin, in the vast majority of cases, can be tolerated by even the most sensitive stomach, and, if any disturbance should occur, it can easily be obviated by decreasing the dosage and then gradually resuming the previous amount, or it may be combined with a little dilute acid, such as vinegar, since

it acts better in an acid medium. Or, if preferred, it may be given during or after meals, the gastric juice containing enough acid to neutralize any unfavorable action. Heroin can be prescribed, in cases which are complicated by an enfeebled heart, without danger of depressing effects. As compared with codeine, its sedative action on the respiration is much more powerful. The fatal dose of heroin is said to be one hundred times the efficacious dose, while with codeine the efficacious dose is one-tenth of the fatal dose. In other words, heroin is ten times safer than codeine, and can be given in much larger doses, if necessary, without danger. It appears to exert a specific action on the center of respiration without causing disturbances of any other organs or centers, and there is no danger of acquiring any habit by its use.

In phtsical patients the well known lack of appetite and intolerance of various foods render it imperative to give remedies which will not in any way interfere with the digestive functions, while at the same time controlling or alleviating the cough and other distressing conditons.

Some time ago my attention was called to a preparation composed of a solution of heroin in glycerine, combined with other expectorants, called Glyco-Herin (Smith), made by Martin H. Smith Co., of New York. Each teaspoonful of this preparation contains one-sixteenth grain of heroin by accurate dosage. It is of agreeable flavor, therefore easy to administer to children, for whom the dose can be easily reduced with any liquid, or by actual measurement. It possesses many advantages not shown by any other preparation I have used, and has none of their disagreeable features.

In citing some of the cases treated by me with this remedy I shall not go into a minute description of any case, but briefly state the conditions which existed and the results obtained, which were uniformly good.

Case 1. S. B., aged 16. Caught a severe cold while traveling. This developed into an unusually severe attack of bronchitis with mucous rales, pain, cough and some slight fever. Prescribed Gloyco-Heroin (Smith) one teaspoonful every two hours, increased to every three hours. After a few doses were taken there was a decided improvement, the respirations were slower and deeper, the expectoration freer and the temperature normal. In a few days the patient was practically well and able to return to school. No medicine except Glyco-Heroin (Smith) was given and the results from its use were excellent.

Case 2. W. L., aged 31. Acute bronchitis. Painful cough, with difficult expectoration, particularly when in a reclining posture. Glyco-Heroin (Smith) in teaspoonful doses every three hours gave speedy relief and a cure was affected in a few days.

Cace 3. S. W., aged 60. Chronic bronchitis. Had coughed for years, with expectoration of a thick, yellow purulent and very offensive matter. Had lost flesh gradually until about twenty pounds below usual weight. No appetite, very constipated, pains all over chest, night sweats and insomnia. Patient on the verge of nervous prostration and greatly weakened. She was given bromides, a tonic, and Glyco-Heroin (Smith), the latter in the usual dose at intervals of two hours. The first few doses were not well borne, as they seemed to cause some nausea, but by giving a smaller dose and then gradually increasing it, tolerance was soon obtained, and the results were remarkable. The cough and expectoration

greatly decreased, the appetite improved and the patient became much better in every way. The treatment was continued as before except that the Glyco-Heroin (Smith) was given every three hours. In three weeks the patient was eating almost everything she pleased, and sleeping well. The night sweats had stopped, together with the cough, and, as the patient expressed it, she "felt like another woman." At present she is in perfect health and needs no medicine except an occasional laxative.

Case 4. B. E., aged 26. Severe bronchitis accompanying an attack of influenza. Various remedies were tried in this case, with negative results, until Glyco-Heroin (Smith) was given in teaspoonful doses every three hours. In a short time decided relief was obtained and the cough stopped permanently.

Case 5. P. M., aged 65. Advanced stage of pulmonary tuberculosis, with tubercular fistula in ano. Examination showed great emaciation, flatness over apices of both lungs and over considerable lung area, tubular breathing, cough with sputum showing tubercle bacilli in great number, and loss of appetite. Patient insisted upon being operated on for relief from the fistula and entered the hospital for that purpose. This was done and the patient rallied nicely from the anesthetic and operation. He was given Glyco-Heroin (Smith) every two hours, with a tonic, with excellent results. In two weeks he was walking around the yard, feeling much better. The wound of the operation healed readily and gave no more trouble. The cough had diminished and the patient was much encouraged. He remained in the institution about six weeks longer and then left, greatly improved. Owing to the advanced stage of the disease in this case, no cure was expected, but the remedy certainly benefited him remarkably.

Case 6. R. L., aged 6. Capillary bronchitis with pains over chest, cough and difficult expectoration. Glyco-Heroin (Smith) administered 15 drops every 3 hours. After taking a few doses the condition was much improved, and a speedy return to perfect health followed.

Case 7. E. R., aged 40. Asthma. Severe suffocative attacks coming on at night, with dyspnea, cough and characteristic sputum. The condition was chronic, having existed for a long time, with recurring paroxysms. No complications were present and no cause, except a possible neurosis, could be assigned. The patient was placed on a carefully selected diet, given a tonic and iodide of potassium gr. 10, three times a day. These remedies were combined with Glyco-Heroin (Smith), given every three hours. During the attacks morphine had to be used to control the spasms. At present the patient's condition is encouraging, being better than for several weeks, and a cure is expected to take place. He still continues taking the above named remedies. The asthmatic attacks, though not entirely stopped, are much less severe than formerly and occur at less frequent intervals.

Case 8. W. H., aged 5. Whooping cough. Spasmodic paroxysms of coughing, sometimes being so severe as to cause vomiting. Tenacious mucus was present, requiring great expulsive effort to loosen it. There was little fever, but the patient was much prostrated and weakened by the cough. Glyco-Heroin (Smith) was given in 10 drop doses every two hours with good results. This was combined with hygeinic treatment, the patient being given as much fresh

air as possible. In a few days the condition was much ameliorated, the cough under fair control, expectoration was freer and easier to raise, and convalescence uneventful. The case was discharged cured and there were no unpleasant sequelae, the patient as present being in perfect health.

Case 9. B. J., aged 26. Influenza bronchitis, with profuse expectoration of greenish-yellow, lumpy matter, together with much lassitude and prostration. The cough was unusually severe, but yielded readily to Glyco-Heroin (Smith), which was given in doses of dr. 1 every two hours. The expectoration became gradually thinner and watery and finally stopped without any unfavorable symptoms manifesting themselves. The patient was put upon a tonic for his general condition and soon regained his usual good health.

Case 10. M. M., aged 65. Chronic bronchitis with painful cough and moderate expectoration. Had coughed for months and was discouraged of obtaining relief, as she said she had tried about everything. In this case there was a very poor heart action, with intermitting, irregular pulse and a history of palpitation and cardiac dyspnea. The patient was given strychnia sulph. gr. 1-60 every 4 hours, with Glyco-Heroin (Smith) dr. 1 every two hours. After a very few days there was a decided difference in the condition, the cough becoming less painful and giving the patient a good night's rest for the first time in weeks, she said. In about a week or ten days' treatment the cough ceased and there has been no return of it. The heart action gradually improved and at no time was there any depressing effect by the use of Glyco-Heroin (Smith); the stomach tolerated it well, although there had been a previous gastritis, and the patient had to be very careful of her diet.

Life Nourishes Life.—Bovinine.—The origin, evolution and interdependence of the different species of animals are themes ever full of interest.

Waiving all discussion of the origin and evolution of the species, as well as other questions of biology and mythology, it is conceded that man was created "a little lower than the angels," but a great deal higher than the highest of the brute family.

Practically, as declared in Holy Writ, man was given dominion over the beast of the field and the fowls of the air. He can not cope with the elephant or lion in strength, but he can devise traps and pitfalls in which to capture them. He can not run with the deer nor fly with the eagle, but he can invent explosives swift enough and rifles accurate enough to overtake either of them.

Brain triumphs over brawn; mind conquers muscle. The pondrous elephant obeys the pusilanimous prod of his pigmy keeper, because the prod is wielded by a superior intelligence. Timid philosophers and pessimists indict this fact of supremacy and dominion as a mere opportunity for cruelty. It is nothing of the kind. It is predestination—a part of the original plan.

Throughout the entire length of the chain, the lower orders contribute to the higher. But for this law of interdependence and necessity the progress of the race would have halted ages ago, and in its noblest representatives of today would rank no higher than the recently discovered "little bushmen" who skulk in the jungles of unexplored Africa.

Life sustains life—it is the law, order and sequence of nature. Our pres-

ent knowledge does not enable us to define this mysterious life, but we know how it is nourished. The animal transmutes plant, pulp and seed into assimilable nutriment, dissolves it in a saline fluid (serum) and sends it coursing through the distributing channels of the body. It is free from waste, distilled, refined, perfected by unerring vital chemistry—it is ready for instant use.

Bovinine is this vital fluid, perfectly sterilized and protected from deterioration. In Bovinine the life giving elements that go to sustain and build the body retain all their nutritive integrity, ready for immediate absorption into the circulating medium, that medium through which all degenerative processes are interrupted, all repairs accomplished, all growth induced. There are no artificially prepared foods to be compared with it, since nature herself compounds, refines and perfects it to her own needs and purposes.

We can not reiterate it in too strong language that the blood is the sole sustainer of life. It carries, contains and contributes every atom, element and molecule of matter that goes to build, sustain and restore the human body—muscle, nerve or brain, flesh or framework. None of the artificially prepared foods, whatever their names or claims, are thus vivified, vitalized, ready for instant assimilation and transmutation into vital force—into vigorous life.

Bovinine is all this. It is this life nourishing fluid, perfectly pure and preserved from deterioration, fully charged with every nutritive element required to replenish the impoverished current. In short, it is an ideal builder, repairer and nourisher in all conditions where an instantly assimilable nutrient is required.

THE BOVININE CO.,
75 W. Houston, St., New York City.

Faulty Metabolism.—When there is a disturbance of harmony between the anabolic and katabolic forces of the body, we have the state known as faulty metabolism. Waste products must be regularly and systematically eliminated by their natural channels before metabolism can be placed upon a normal basis.

In cases where metabolism has been impaired for some time, waste products have accumulated, the body is full of filth, and as two things can not occupy the same place at once, nutrient particles can not enter the tissues until the waste is removed. The system requires to be renovated just as much as a solied garment.

Many doctors' idea of elimination is to purge the bowels. This is all right as far as it goes and where indicated, but it is wrong to try to make the bowels do all the eliminating, and always a mistake to give cathartics when the bowels are not constipated. The result of such a procedure is to exhaust the patient and to cause the bowels to become weak and irritable, which will still further disturb assimilation.

The true way—nature's way—of eliminating waste matter is to give a remedy which will cause each organ to do its normal work—the skin, kidneys, and all organs of elimination. A remedy which will equalize the circulation and compel all the emunctories to do their natural duty.

Let us analyze a cold to illustrate this.

Preceding a cold the system is in a state of faulty metabolism, full of waste products and highly acid. As a result the nervous system is supersensitive. Its reserve force is soon exhausted by exposure to draughts, etc. The result is a chill or shivering fit—the cutaneous vessels all shut down. The kidneys do more at first, but the demand on them

goes on increasing until they partially suspend operations. The lungs increase their respiratory efforts, but with great labor. Were it not for the outflow of serum and mucus by the nasal and bronchial membranes rendering some relief, there would be an explosion in the way of convulsions.

But now we give a remedy, preferably Respiton, under the action of which the pressure is taken off, the tension is removed from the kidneys and lungs—they have now much less to do and begin to recuperate. There is no longer need for the nasal and bronchial mucous membranes to eliminate artificially, therefore, under the continued influence of Respiton, which causes the emunctories to act naturally, the whole work of elimination is put on a normal basis and the patient soon begins to improve.

Full-size bottle for test use sent free to physicians paying express charges.

DAD CHEMICAL CO.,
105 Chambers St., N. Y., U. S. A., and
42 Rue du Marche, Neuilly-Paris, France.

Hay Fever.—In the United States the majority of cases of hay fever occur in the fall of the year, and for this reason the disease is often designated autumnal catarrh. There is only one reliable way of preventing the attacks, and that is a change of residence to some place, whether the seashore or mountains, where susceptible persons may enjoy immunity from this distressing disorder. Few, however, can avail themselves of this plan, and the vast majority of sufferers are compelled to rely upon medical treatment. Internal medication has proved of limited utility, but the results of local treatment have been much more encouraging. In most instances there is present a catarrhal condition of the nose and throat, frequently extending down to the bronchi, and giving rise to constant sneezing, refuse nasal discharges, cough and asthmatic attacks. These symptoms can be greatly relieved by inhalations of Vapo-Cresolene, which exerts a soothing effect upon the affected mucous membranes, and penetrates to places which cannot be reached by sprays, insufflations or other topical applications. If the air of the bedroom is charged with Cresolene vapor, which is perfectly harmless, the sufferer will be able to rest in comfort, and be spared the exhaustion due to the loss of sleep, which is often present in these cases. Under the use of Vapo-Cresolene an attack of hay fever not only runs a shorter course, but is divested of most of its disagreeable features.

Sanmetto Endorsed as the Most Valuable Remedy in Kidney, Bladder and Urethral Affections.—Sanmetto is a valuable preparation. Indeed, I have found it one of the most valuable remedies in the treatment of gonorrhea and all kidney and bladder affections, either acute or chronic, and can endorse same to the medical profession.

CHAS. E. BARNES, M. D.
Indianapolis, Ind.

In a case of nervous irritability, I have used Neurilla with most gratifying results, in that it quieted nervousness more than and gave better tone to the general health of the patient, than any preparation I have ever before employed in such cases.

A. R. MCCORMICK, M. D.
Tylersburg, Pa.

Intestinal Antisepsis in Fevers.—Though the usual typhoid, malarial and yellow fever epidemics have not yet appeared, it is well to guard against them

by taking precautionary measures. If it be true that the materies morbii of these diseases belong to the bacillus group, the remedies manifestly are an antiseptic and an antipyretic. As an intestinal antiseptic we have nothing better than salol. The consensus of opinion is in this direction. When we add the antipyretic and anodyne effects of antikmania, we have a happy blending of two valuable remedies, and these cannot be given in a better or more convenient form than is offered in "Antikamnia and Salol Tablets," each tablet containing 2½ grains antikmania and 2½ grains salol. The average adult dose is two tablets. Always crush tablets before administering, as it assures more rapid assimilation. It is not our desire to go into the study of bacteriology here; our aim is simply to call attention to the necessity of intestinal antisepsis in the treatment of this class of diseases. If in the treatment of these diseases an intestinal antiseptic is indicated, would not the scientific treatment of the conditions preceding them be the administration of the same remedies? Fortifying the system against attacks is the best preventive of them.

Sanmetto as a Genito-Urinary Tonic and Remedy.—I have prescribed Sanmetto in a number of cases of incontinence of urine, with gratifying results. I believe it to be a remedy par excellence in all cases of genito-urinary complaints. I have reason to believe that Sanmetto possesses aphrodisiac properties equaled by few remedies at our command.

G. C. Snyder, M. D.

Moxahala, O.

The phosphates of iron, soda, lime and potash, dissolved in an excess of phosphoric acid, is a valuable combination to prescribe in nervous exhaustion, general debility, etc. Robinson's Phosphoric Elixir is an elegant solution of these chemicals. (See page 413.)

For shaking palsy nothing excels tinct. Aesculus Glabra, one-half drachm; Celerina, eight ounces. Teaspoonful every two or three hours.

Further Reports on Chaparrin.—Chaparrin is rapidly growing in favor with the profession as an effective remedy in nearly all classes of skin diseases. Under local treatment with Chaparrin cases of chronic eczema which resisted all other treatment, have been speedily cured. With these patients it is of course necessary to observe the usual directions in regard to diet and hygiene.

Dr. Holman Taylor, of Marshall, Texas, reports the most gratifying results from the use of this remedy in cases of scabies tinea, chancroid and other skin affections. Several cases of eczema are reported cured after the third application without any return of the disease.

Chaparrin introduces a new dermotological agent—chaparro amargoso, the active principle of a shrub indigenous to Texas and Mexico, which in Chaparrin is combined chemically with slicylic acid, phenol, and camphor.

Chapparrin is manufactured by the Matthewson Laboratory, of Marshall, Texas, to whom our readers are referred for literature.

Narkogen is one of the latest preparations placed upon the market by the Tilden Co. It is a most valuable hypnotic, as well as an anodyne and antispasmodic. All those who have had occasion to use it have none but words of praise for it. Its principal value lies

in the fact that it possesses an absolute control in relieving the manifold conditions of unrest, insomnia, and those other conditions of a perturbed nervous organism, which so frequently arises in the course of diseases and render miserable the condition of patients who not only desire but are in need of rest. That the claims made for this preparation are not exaggerated is made self-evident by an examination of the formula, which is as follows:

Narkogen (Tilden's).—Each fluid dram contains: Hydrate of chloral grs. x; potassium bromide grs. x; hyoscine hydrobromate gr. 1-200; Narkine (Tilden's) gr. ss. It will be seen from this that all essential conditions are fulfilled and results are certain. The dose is from one-half to one fluid dram in water, repeated as occasion requires.

Treatment of Eczema of the Scalp.—Parker pleads for more patience and perseverance in the treatment of this troublous affection. So many physicians prescribe time or pronounce the condition hopeless that parents often discredit the physician who promises recovery within a reasonable time. The first measure in successful treatment is a thorough washing and shaving of the head. Castile soap and much water of a temperature not less than 100 F. should be used. The same water should not touch the head twice and pledgets of absorbant cotton are to be used to remove the crusts. When cleansed the head should be dried with a clean, soft towel. During treatment the pillow case should be consigned to the wash tub each morning and a clean one put into its place. These are not over particular, but imperative details, if favorable results are desired. Jugglery in prescriptions can not avail and rigid hygienic measures, extending to all the surroundings, must accompany medic treatment. The second step is in th case of nursing infants to treat the mo bid constitutional condition, generall found in the mother. The alterativ iodia, is nearly always applicable an in severe cases should be administere to both mother and child. If the irrita bility attending the eruption require special treatment, bromidia should b given. Some children will require a easily assimilated iron tonic. Th bowels must be kept open with a mil aperient given in the early morning. L cally boroglyceride is the best oint ment. Ecthol is also a remedy of muc value, being a powerful corrector of de praved conditions in fluids and tissues It is employed diluted, according to th severity of the case, and sprinkled upo a thin cap of surgeons' cotton. The ca should be renewed, and the old on burned daily.—*Medical News.*

An Entirely New Intestinal Astringent.—Protan is a definite chemica compound formed by the synthesis o tannic acid with nucleo-proteid. Pro tan contains 50 per cent. of tannic acid It forms a light brown powder, is taste less, odorless and entirely free fro astringent action upon the mouth an stomach. It is insoluble in water, aci solutions or the gastric juice; does no coagulate albumen nor precipitate pep sin or peptones.

Protan is unaffected by the gastri juice, and passes through the stomach chemically unchanged; it is therefor entirely free from deleterious action upon the stomach and processes of digestion.

Protan first evolves its active astringent ingredient—tannic acid—when it reaches the small intestine and comes in contact with the alkaline pancreatic juice. Free tannic acid is but very

owly evolved from Protan as it passes downward through the intestines, so that its astringent action is manifested throughout the entire intestinal canal. This fact is verified by the appearance of minute quantities of both Protan and tannin in the feces.

In typhoid fever, attended with excessive bowel movements, Protan yields excellent results in reducing the frequency and amount of the stools. In hemorrhage from the bowels, occurring in typhoid fever, dysentery, etc., Protan coagulates the blood at the seat of hemorrhage. It is an ideal intestinal styptic in doses of thirty grains every hour or two.

Dr. J. Fulton Prudon, in a paper read before the Jefferson County (Ky.) Medical Society, remarked:

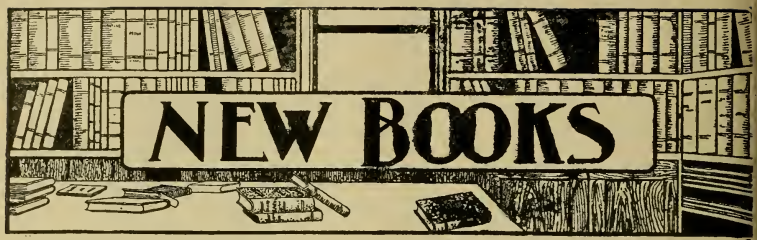
"The indications for treatment in typhoid fever are clear. First, an antiseptic which will neither be absorbed by the stomach nor have its antiseptic properties neutralized by the gastric juice. . . . . Antiseptics that are absorbed by the stomach need no comment further than to say they never reach the bacillus, and can be of service only in so far as they improve the condition of the stomach for the reception of nourishment. From clinical observation we are fully satisfied that Listerine in teaspoonful doses, repeated as required, improves the condition of the stomach for the reception of nourishment, and if all the Listerine is not absorbed by the stomach it assists the action of the intestinal antiseptics."

Since Listerine was first introduced to the profession, it has had a wide use in all forms of fever as an intestinal antiseptic, and as an adjuvant. It has won a place for itself as a vehicle for the better administration of other agents. Diluted half and half, or one part of Listerine added to three or four of water, and given in doses of one or two tablespoonfuls every two to four hours, the condition of the stomach and bowel is improved.

In the sponging that is so often relied on to reduce temperature in typhoid, if a tablespoonful of Listerine is added to the basin of cold water, the condition of the skin is improved. As a mouth wash or gargle during any form of fever, Listerine is not excelled.

Drug Dyspepsia, such as frequently results from the free use of sodium saliclate in acute articular rheumatism, can be obviated by administering the drug in Sharp & Dohme's Pan-Peptic Elixir as a vehicle. This method of giving the iodides and bromides is also admirable. These drugs are freely soluble in this elegant tonic digestive. They are much more easily administered, especially to ladies and children, because of the palatability of the solution. The appetite is stimulated, not lessened. The digestion is improved, not impaired. The treatment is always more effective and the patient is better nourished because he eats with a relish and assimilates what he eats.

During convalescence from typhoid fever or the debilitating diseases, when the life forces are struggling, the patient is wonderfully helped by a teaspoonful of Pan-Peptic Elixir after each meal.



The International Journal of Surgery Co., of 100 William street, New York, advise us that they have now on press a valuable work on "Nose and Throat for the General Practitioner," by G. L. Richards, M. D., fellow American Laryngological, Rhinological and Otological Society; fellow American Otological Society; associate editor Annals of Otology, Laryngology and Rhinology; Otologist and Laryngologist Fall River Union Hospital, Fall River, Mass.

The volume will be profusely illustrated, bound in cloth, and will contain about 375 pages. Price $2.00.

The Charitable Rich and the Poor Doctor.—"In my six months of small town practice I learned many other things, and none more puzzling than a certain aspect of the charity of the rich," says the author of "The Autobiography of a Woman Doctor" in *Everybody's Magazine*. "A number of the women there devoted much time to the poor, and one of their good offices was to bring these to me (often in their carriages) and get me to treat them for nothing. I was desperately poor myself, having others to help as well as my own living to make, and I confess my spirit rebelled sometimes when these prosperous and well-fed philanthropists patted themselves for presenting my time, strength, and knowledge to the proteges. I remember one case in particular, when I was called upon a bitter winter night by an Italian who could not speak a word of English and followed him two miles through the snow where I worked without help or convenience of any kind till ten the next morning, to go home utterly spent; and the consciousness of having saved life was made a trifle bitter by the picture of the lady patroness who had donated my services waking from placid sleep to congratulate herself on her good deed. I was humane, but I was also human. She might at least have paid me!"

Literary Notice.—In Paris and Geneva two mothers, both prominent women, one the daughter of Mr. Lewis Saulter, president of the McCall Mission, have translated into French "What a Young Boy Ought to Know," one of the Purity Books in the Self and Sex Series, by Dr. Stall, Vir Publishing Company, Philadelphia, that their own boys might have the useful knowledge this book contains.

Where "Know How" Counts.—When the first news of the Pope's serious illness was received in this country, the August forms of *Everybody's Magazine* were already on the press

ne publishers, realizing that all live mericans would be interested in know- g the name of the Pope's successor, pped the presses that were running the August number, worked photo- gravers, compositors, and electrotyp- s overtime, got to press in record time th the distinguished article "The pe's Successor," by F. Marion Craw- rd, ran the presses night and day, rked the bindery force until 12 lock every night, and made complete deliveries to their distributing agents two days ahead of the usual time, issuing the magazine on the 18th of the month instead of the 20th, the usual day of issue. The illustrations are superb, the article is authoritative, convincing. The publishers of *Everybody's Magazine* are to be congratulated upon their achievement, but especially upon the alertness and enterprise which made it possible.

REVIEW OF MEDICAL AND SURGICAL PROGRESS.

Typhoid Fever.—D. F. Osborne, pro- ssor of therapeutics in Yale Medical hool, regards typhoid fever as oc- rring most frequently during au- nn, but may occur at any period of year, and some cases are constant- found in large population centers. e must first diagnose the case, then re- rt to the board of health, and as far possible help locate the cause, which generally in the milk or water supply, d the infectious material may have en taken into the system away from ient's place of residence.

He regards typhoid fever as prevent- e, and thinks that if the excreta are idly disinfected, much may be done eradicate the disease. We know the ne of typhoid patients may contain hoid bacilli; that these bacilli, ether from feces or urine, if placed proper media will grow, and that y are not killed by freezing or hot ter, but yield to boiling for 15 to 20 nutes. In view of above facts, we st warn the family of danger; we st insist on rigorous cleanliness and tchfulness on the part of attendants. not allow the infection to spread. not allow patient to sit up; order bed pan for urine and feces and the pan should contain solution 1-500 bichloride mercury and excreta should stand one-half hour in the solution. This solution should be made of tablets containing those salts which prevent the mere coagulation of the outer of the albumens, and thereby allow the bichloride to infiltrate the entire matter to be disinfected, (practically all tablets on market are so made. Abst.) Feces should be stirred and large masses broken up. After standing for half an hour the feces should be covered with unslacked or chlorinated lime and then placed in water closet or in country, buried away from water supply and running streams. Bed pan should be cleansed each time with boiling water and antiseptic solution. Clothing should stand one hour in 2 per cent. carbolic acid solution and afterwards boiled. Fumigation and dry heat sterilization, while the most efficient, are not necessary if above precautions are taken. All in attendance on patients should wash hands before eating; probably no infection is carried by patient's breath, inhalation of vapors from excreta is to be avoided.

General management of case demands, first, large, well-ventilated room, with fireplace; second, bed is not to be too large, springs strong enough to prevent patient's lying unlevel and thereby causing muscle-tire and may be bed sores; mattress must be smooth, covering light; in case of collapse, use blankets rather than comfortables. Two nurses are necessary and nurses cot should be in patient's room if it is large; if not, in adjacent room; typhoid patient may get up and try to walk at any time and should have nurse present at all times. 3. Regular cleansing of body by baths or sponging; wash mouth and lips daily with boric acid or formaline solutions will prevent fissures, which formed, should be touched with 25 per cent. nitrate silver solution.

Diet is the most important factor in treatment; the waste exceeds nutrition; if stomach rejects foods, the fight is harder and case may be lost: put no irritating medicine into the stomach. As to food, milk is the best and should be given every three hours, night and day, mixed with a tablesponful of lime water or ¼ vichy, it is more palatable. A pinch of salt to a glass of hot milk will improve it. Koumiss has sour taste and is well borne by stomach. If rich milk disagrees, skim, but must give three quarts in twenty-four hours in order to sustain life, on skim milk. Additions and substitutes are found in malted milk, albuminous food, beef peptones and teas; white of egg beaten with equal water and give with a little brandy, expressed raw beef juice furnishes not only blood extracts, but also the muscle juice which recent investigations show to be a valuable addition. Keep a chart of amount of nourishment taken. Adults should not take less than 2 nor more than 3 pints daily of milk or its equivalent; readjust diet on appearance of gastric distress or flatule cy. Be cautious not to over feed; t is easiest done in first week when fe is advancing. Arouse patient bef giving food, else may get particles trachea and cause pneumonia. G large amounts of water always in fev it keeps skin moist, increases urine a relieves tendency to renal congesti and elimnates poisons from syste Carbonated waters or water acidulat with dilute phosphoric, hydrochloric sulphuric; lemonade is perhaps be barley is very soothing; a tablespoon of prepared barley is covered in pint water, strained, cooled. Cracked ice iced drinks are allowed by many *ad li tum.*

Osborne says begin in every case typhoid the early administration chloride of iron as makes whole cou of fever less active, lowers temperatu lessen complications, improves blo and germicidal action of gastric ju and thus prevents ascent of colon bac into stomach. As a germicide for phoid bacilli, the chloride of iron exceedingly active, even in very dil solutions, and I believe it to be of be fit in typhoid fever whether its acti after absorption lies in its increase antitoxic power of blood serum or stimulating the haemato poietic orga Give it in 15 drop doses after food, w diluted, every six hours, or give t spoonful of a solution containing 1 ferri chloride and syr. acidi citriti, w diluted, or may substitute dilute ph phoric acid for citric.

Temperature of 105 to 106 degr for short time is not dangerous to l unless long continued; long contin even lower temperatures are dangero increasing tissue metabolism and fa degeneration. As working rule, do n let temperature go above 102 deg. any length of time. For headache

The Sumbul Series

No. 2

In our advertisement of Series No. 1 we gave some valuable formulas and expatiated on our expert experience in preparing Sumbul, at the same time dilated upon the therapeutic value of the drug.

/e reiterate there are none so good as

WM. R. WARNER & CO.'S.

The following recipes may interest our readers

TABLETS 'ONO-NERVINE

WARNER

xt. Sumbul,	1-2 gr.
iosphorus,	1-100 gr.
xt. Damiana,	1 gr.
errі Carb.	1 gr.
safetida,	1-2 gr.
xt. Nux Vom.	1-10 gr.

In each tablet.

A VALUABLE TONIC

TONO SUMBUL CORDIAL

THE IDEAL TONIC

12 oz. bottles only.

—FOR—

PHYSICIANS PRESCRIPTIONS

PIL. SEDATIVE

WARNER

℞

Ext. Sumbul,	1-2 gr.
Ext. Valerian,	1-2 gr.
Ext. Henbane,	1-2 gr.
Ext. Cannab. Ind.	1-10 gr.

In each pill.

A VALUABLE SEDATIVE

pecify Warner & Co. when you prescribe and avoid disappointments

---

WM. R. WARNER & CO. MANUFACTURING PHARMACEUTISTS

HILADELPHIA NEW YORK CHICAGO NEW ORLEANS

first days, may give 2 grs. acetanlid, monobrom camphor ½ grain and caffein ½ grain; repeat in three hours if no relief; give only for two or three days; occasionally, if fever is very high, may give 15 grains antipyrine, but only one dose of this. Water is best agent to reduce temperature as sponges of tepid water, or cold alcohol, or cold water, or ice-cold water, and use of ice water bags and coils to head and abdomen, cold compresses, wet sheets, cold sprinkling, cold bath or tubbing. These are used according to intensity of fever and in order mentioned. The Brand method is used in private practice as a rule when others have failed. Brand method is immersion in bath at 85 degrees F., or as low as 75 degrees F., until temperature falls to 100.5 or 101 degrees, and repeat every three hours, if temperature passes above 102 degrees F. Three assistants are necessary to do it well, physician or trained nurse should be present and rectal temperature should be noted every two minutes. Contraindication to tubbing are pneumonia, intestinal hemorrhage, menstruation, nephritis and cardiac disorders. The best treatment for high temperature is to prevent it by removing secondary infection arising from absorption of toxines of putrefaction, decomposition and fermentation from alimentary canal. There are small bowel ulcers, and applying surgical principles, the cleaner those are kept the lower will be the temperature. The better washed out the bowels are, the less will be the absorption of products from ulceration; and the better the condition of the bowel the better the condition of liver, less congestion of the portal circulation and less absorption of toxines from typhoid bacilli, and less tendency to migration on the part of both typhoid and colon bacilli. Hence bowel cleanliness, as near as we can assure, is the basic treatment in typhoid fever. Make this your working rule, says this observer, in speaking of the management of the bowels, that constipation is something not to be desired in a disease in which there is inflammation and irritation of the intestine and in which diarrhea is a prominent symptom; numerous, irritating movements are not to be desired but a daily thorough evacuation of the bowel must be had, except in cases complicated by hemorrhage. There is no specific to bring about this bowel cleaning. The Woodbridge treatment of small doses of combined cathartic and antiseptics tends in right direction. The author favors calomel treatment in first week of the disease, given in 5 gr. doses with 15 grs. bicarbonate soda on alternate days and stop if there are signs of depression. Castor oil in capsules or combined with saccharin and oil of wintergreen is good laxative, but may disturb the stomach. In second week calomel is too active, and this observer favors a light saline as Carlsbad salts or Hunyadi water, or if these are too mild Rochelle or Epsom in doses to suit case; if the above remedies disturb the stomach, omit them and give enemas of dr. ss. of glycerine to dr. iv. of water which seldom fails to clear the bowel. Leave some 1-10 grain morphine tablets with nurse, one of which is to be given if there is a tendency to diarrhœa after one large or two small movements.

As to intestinal antiseptic, Osborn thinks the Philadelphia treatment of two drops of tincture iodine to one dram of carbolic acid is not desirable, owing to tending to irritate the stomach, and besides, does not reach the lower part of small intestine before being absorbed; salol furnishes the best drug for this purpose and should be given in

North Carolina Medical College

DAVIDSON, N. C.

SITUATION—Heathful, moral, conducive of study.

STANDARD—Equal to any College of the South.

RECORD—Excellent as shown by the high standing of our graduates.

EQUIPMENT—Seven Laboratories, Three Hospitals, Two General Dispensaries.

CLINICAL INSTRUCTION---On the modern plan.

CHARLOTTE CLINIC---A superbundance of material.

FACULTY---Strengthened by ten of Charlotte's leading Physicians and Specialists.

INSTRUCTION---By "quiz method" and laboratory work.

PHENOMENAL GROWTH---From 11 to 67 students in 10 years. From 4 to 17 Professors in 10 years.

For further information and Catalogue

Address

J. P. MUNROE, M. D.,

DAVIDSON, N. C.

grain doses every three hours for two or three days, and then in 3 grain doses every six hours. If larger doses of this drug are given, may get renal irritation and the nurse should watch if urine gets dark from salol decomposition and setting free of too much carbolic acid. Smokey or albuminous urine are signals to stop the salol. Beta-naphthol, bismuth and beta-napthol are good preparations, but not so efficient as salol. This treatment, which prevents intestinal fermentation and removes products of decomposition by daily evacuations of bowels, will lessen secondary infection; also lessens tympanites, which often may be the cause of hemorrhage or perforation. This plan of treatment given, less nervous symptoms, such as delirium, stupor and mental hebitude. A treatment which will take a case through without hemorrhage, delirium and tympanites is to be commended.

Weakness of pulse, hemorrhage from intestine or signs of peritonitis call for omission of daily administration of laxative.

As to stimulation, this writer favors alcohol in the shape of whiskey or brandy, because he thinks by being oxidized itself, it lessens tissue oxidization, but he thinks the chief commendation for alcohol is its dilatation of the peripheral blood vessels, increasing radiation and lowering temperature. He thinks a rapid heart is made slower, and as a slow heart is made faster and that it will lower too high arterial tension. The indications for its use are rapid heart, high fever, and the group of head symptoms, muttering delirium, subsultus, carphology, trembling tongue and dry skin. He thinks a pulse of 110 in adult is becoming weak, while one of 120 is an indication positively for stimulation. Likewise, pulse below 100, of low tension and dicrotic, calls for stimulation. As to dose, give alcoholic more than non-alcoholics, use whiskey or brandy, begin with teaspoonful every three hours diluted with milk, water, effervescing water, albumin water. Do not give too much alcohol; if while giving alcohol the pulse becomes strong and bounding, skin and tongue dry, face flushed and alcoholic to breath, you are giving too much. Some times what are thought to be meningeal symptoms are only delirium from alcohol. In collapse, do not rely on alcohol, as it may cause too much vaso-motor dilitation. DaCosta's tablet of digtalis, strophanthus, belladonna and nitroglycerine act well in many cases of weak pulse.

As to indication for strychnine when about the beginning or latter part of the third week, we find weak heart and depression; this calls for strychnine. It may be needed earlier; it is best to reserve the administration of strychnin until temperature begins to fall. At this time a morning cup of black coffee acts well on heart. Dosage of strychnine varies, 1-30 grain every 6 to hours is full; every 3 hours is too frequent, and if given so often 1-50 grain is sufficient, given hypodermically. The writer, speaking of troublesome symptoms, thinks diarrhœa is best controlled by mild cathartics followed by 1-10 g doses of morphia and may use 10 to 15 grain doses of bismuth subnitrate or subcarbonate. He favors the 1-10 grain doses of morphia to produce sleep, unless there are meningeal symptoms. He uses bromide and cold applications. For tympanites use cold compress to abdomen, enemata of glycerine and turpentine or insertion of the rectal, but the best cure is to keep bowels so well cleansed that gas formation will not result. It is a difficult symptom to overcome, and, besides, by pressure disturl

PROTAN

MEETS EVERY
REQUIREMENT IN

Typhoid Fever

It heals ulcerations in the ileum, prevents the development of bacteria and toxins, and checks hemorrhage in typhoid fever, because it is

ANTISEPTIC AND ASTRINGENT TO THE ENTIRE INTESTINAL TRACT

FURNISHED IN POWDER OR TABLETS
Interesting Literature and Samples mailed upon request

Introduced by
H. K. MULFORD COMPANY
Chemists
Philadelphia New York Chicago

ing the heart favors hemorrhage, perforation and absorption of toxines. As to hemorrhage, for slight stop food for a few hours, give morphine hypodermically and tannigen or tanalbin in 10 grain doses. Geletin may be given in form of wine jelly or injected subcutaneously in aseptic solution. He does not believe ergot is of value, but thinks nitroglycerine by dilating vessels, will relieve internal tension. In severe hemorrhage apply ice poultice (cracked ice with sawdust or bran), elevate foot of bed to relieve restlessness from cerebral anemia; if collapsed, give normal saline solution subcutaneously; a sudden fall of temperature, pallid face, loss of pulse tone that was previously good, should cause suspicion of hemorrhage and treatment should be directed accordingly, even though blood has not passed by bowel. In perforation, onset, as a rule, gives some preliminary signs. Pain is sharp and in abdomen, anxious face, abdominal tenderness; stop food, give hypodermatic injection of morphine and call surgeon in to consider advisability of laparotomy if peritonitis has not begun; if peritonitis has set in, surgical interference is of little avail. If collapse from a weak heart or from rapid decline of temperature, not hemorrhage or perforation occurs and we have not been pushing strychnia and alcohol too freely preceding, we can simply increase dosage; in actual collapse give strychnine and atropine and pushed along with a saturated solution of camphor in olive oil hypodermically, with dry heat to the feet, head and heart, oxygen inhalations and aromatic spirits of ammonia, always watch urine and do not allow retention. Apathy or when using morphine call for especial watchfulness of bladder.

As to bed sores, prevention is the best cure, change parts of pressure, sponge with alcohol, massage, with lonolin, use ring cushion; if ulceration occurs, treat on surgical principles. Thrombosis of femoral vein may occur and calls for elevation of leg, morphine for pain, flannel bandage to prevent excessive edema; equal parts of ichthyol and olive oil locally. Do not manipulate leg too much or bandage too tightly, as you may loosen embolus with consequent pyaemic complications, or sudden death.—*Abstract International Clinics, Vol. III.*

Southern Fevers.—W. Krauss discusses the question of fever occurring in the Southern States with special reference to the possibility of an "*x*" fever, neither malarial nor typhoid. His conclusions are drawn as follows: (1) A very sudden hyperpyrexia in midsummer is more apt to be sunstroke than "congestion." Do not give quinine without cause. (2) The malarial leucocyte count is only collateral evidence of malarial infection, and the count must include all the cells in the spread. (3) The Widal test may lead us into error in a small percentage of cases; the blood culture test is more difficult and has no negative value. (4) A chill or fulminant onset of a typhoid fever is not sufficient evidence of a complicating malaria. (5) A chill or sudden disturbance of the temperature curve during convalescence in typhoid fever is not necessary malarial. (6) In a malarial infection the persistence of an irregular subcontinuous fever after thorough cinchonization is not evidence of a typhoid complication or of remaining plasmodia. (7) A positive diagnosis of summer-fall fevers is not always possible. (8) In the hygienic management of summer-fall fevers we should presuppose a double infection, irrespective of symptoms. (9) Some of the sum-

mer fall fevers are typhoid, some are malarial, and a few of them are neither one, but the writer is opposed to the belief in an *x* fever.—*Journal American Medical Association.*

The Management of Fever in General.—A. A. Eshner states that fever is most commonly due to changes secondary to infective processes—that is, to the toxic effects of the products of bacterial and cellular activity. The regulation center governing the amount of heat production lies in the central nervous system. While there may be a theoretical difference between fever and pyrexia, there is no practical difference —at least, none from the clinical standpoint. It has been thought that elevation of temperature in the presence of infectious diseases is a conservative process, perhaps having antibacterial or antitoxic value, but as to the accuracy of such a view the evidence is not conclusive. The great problems that confront the clinician are to remove the cause of the fever in so far as it is possible and to restore metabolic equilibrium. It may be possible to do much along the line first mentioned, but we have at our disposal emesis, catharsis, diaphoresis, diuresis, enteroclysis, hypodermoclysis, and intravenous transfusion. Acting along the second line we may employ various baths and sustain the heart and lungs with the usual stimulants. Antipyretic drugs are not necessary as a rule, and their use is at all times attended with danger.—*Journal American Medical Association.*

A Clinical Observation of Ninety Cases of Typhoid Fever.—These are analyzed in tabulated form by R. M. Harbin, whose conclusions are summar-

DOCTOR:

HAVE YOU USED LEU-KRE-TOL

THE NEW ANTISEPTIC

COMPOUND?

The Formula combines, under heavy trituration, the following drugs: Acinum Boracicum, Acidum Carbolicum, Menthol, Hydrastine Sulphas, Sodii Boras, Alumen, and Glycerinum. The powder will readily go into solution and is not only an Ethical, Scientific Pharmaceutical product, but also a pleasant, nor irritating and efficient preparation.

PHYSIOLOGICAL ACTION:

Antiseptic, Disinfectant, Deodorizer, Astringent and Antiphlogistic, reducing inflammatory exudates by its exosmotic action.

THERAPEUTICAL INDICATIONS:

Catarrhal conditions of nose and throat, tonsillitis, pharyngitis, hoarseness, etc. Usual ℞ being (Leu-Kretol ʒi Glycerine ʒiv Aquæ Q S. ℥vi) either as Douche or Spray.

VAGINAL DOUCHE:

Especially valuable in Leucorrhoea, Vaginitis, Urethritis, Gonorrhœa, Pruritus, Septic conditions of Puerperal State, (being a superior remedy to Creolina, etc..) and in all offensive Uterine and Vaginal discharges. (ʒi to 1 Qt. of hot water.) Samples and literature on request.

Don't forget the name LEU-KRE-TOL.

Manufactured by the

LEU-KRE-TOL CHEMICAL CO.

Baltimore, Md.

Branch

Winston-Salem, N. C.

ized as follows: (1) Fasting and a restricted diet are indicated because of pathologic conditions. (2) A clinical fact maintains that emaciation occurs independently of the amount of food taken. (3) All severe cases should be subjected to fasting for twenty-four to forty-eight hours to relieve the active symptoms, which exhaust the patient more rapidly than the lack of food. (4) After a fast should be prescribed a restricted diet of broths, diluted milk, etc., in definite quantities. (5) Gelatin prevents too rapid emaciation in certain cases and renders hemorrhage less liable. (6) The cold bath or the modified cold bath is more effective during a fast. (7) Peristalsis favors the absorption of toxins, and cathartics should be used only to remove undigested food. (8) The presence of intestinal ulcers should be assumed to exist in every case, and the proper treatment is rest, which is better attained by fasting and a restricted diet, thus preventing hemorrhage and perforation. (9) The presence of diarrhea and vomiting indicates the adoption of the fasting treatment. (10) Fasting and a restricted diet shorten the course of the disease and many cases run an abortive course after the amphibolic period. (11) Many of the vaunted cures from specific drugs are dietetic in fact. (12) Recrudescences are nearly always due to dietetic errors. (13) In the above report, 45 consecutive cases occurred without death. Of 87 whites, 2, or 2.2 per cent., died. Of colored, 2 died, and the low mortality of 4.4 per cent. of all cases was ascribed to the above treatment.—*Journal American Medical Association.*

Recent Progress in Typhoid Therapy.—It appears that acetazone was employed first, in medicine, by Eugene Wasdin, of the United States Marine Hospital Service, who reported his experience in the *Therapeutic Gazette,* May, 1902. He concluded that acetazone, though efficiently germicidal, is innocuous to man, and in the treatment of typhoid fever is capable of destroying the primary colony if brought into contact with it. In typhoid "it enables us to obviate intestinal infection and absorptive toxemia therefrom, thus favoring the formation of protective anti-bodies and limiting, in many cases, the disease to its normal cycle."

G. H. Westinghouse (*Buffalo Medical Journal,* August, 1902) reported his observations on the use of acetazone in forty cases of typhoid. He found that convalescence was rapid. The relaxed condition of the bowels subsided so that the occasional use of the enema or a laxative became necessary. The drug appeared to have a diuretic effect, one patient voiding 112 ounces of urine in twenty-four hours with a corresponding amelioration of the symptoms, tympanites and delirium disappearing. In all cases the clinical diagnosis was confirmed by Widal's reaction, Ehrlich's test and blood count. The author is of the opinion that acetazone, as an intestinal antiseptic, is unequaled by anything he ever employed.

Abt and Lackner (*Therapeutic Gazette,* October, 1902) reported in detail forty cases of typhoid fever in which acetazone was employed, with thirty-eight recoveries. The average duration of the fever after the administration of acetazone was begun was thirteen and a half days in thirty-seven cases, including two relapses. The Widal test gave positive reactions in all cases. Rose spots were present in twenty-five cases, epistaxis in four.

Two cases were reported (*Medicine,* November, 1902), by W. A. Evans, in

DOCTOR: Here is a Pointer for You, and This Is the POINT

ABBOTT'S SALINE LAXATIVE is the best eliminant and the basis of the best treatment for the uric acid diathesis and other auto-infections on earth.

It is particularly indicated in Summer Difficulties: To clear out, clean up, and keep clean means from sickness to health, and THIS WILL DO IT. Prove it for yourself.

KEEP IT ON HAND

IT DOES THE BUSINESS AND NEVER GRIPES

Abbott's Saline Laxative is over 80 per cent chemically pure Sulphate of Magnesium in effervescent combination, while its several imitators are ill-tasting, shabby affairs of less than one-fourth its strength. It is pleasant to take and suits all conditions where a prompt and efficient eliminent is required.

It is successfully prescribed by increasing thousands of doctors everywhere. Most jobbers and leading retailers are supplied. Specify on your prescriptions, or, if you dispense, order of jobber or direct from our laboratory for your office. Single package to physicians, by post, 35c. In lots of half dozen or more, per dozen, $4.00. Retail price, 50c. Direct orders we deliver prepaid when cash accompanies. See price list for discounts in gross quantities. Don't fail to try Abbott's Saline Laxative when you want results. It is pleasant to take, promptly efficient, does not nauseate and never gripes.

SALITHIA Our ready-to-use treatment for Rheumatism, Gout, and the thousand-and-one manifestations of the uric acid diathesis, is a soluble salt of lithium in granular effervescent combination with colchicine. A trial will demonstrate that this preparation is unexcelled. Same size and style as above. Retail price, 75c. One package to physicians, post-paid, 55c. In lots of half dozen up, $6.00 per dozen. Terms as above.

A COMPANION REMEDY to ABBOTT'S SALINE LAXATIVE, which should be used in all infective, fermentive conditions: dyspepsia, typhoid fever, Summer derangements, etc., is

THE W-A INTESTINAL ANTISEPTIC

A compound preparation of the C. P. Sulphocarbolates of lime, soda and zinc. It is efficient, non-irritating and first-class in every way. Price, tablets, 100, 35c.; 500, $1.40; 1000, $2.75. Postpaid for cash with order.

Samples and our complete price list of alkaloidal remedies—up-to-date supplies for the physician—will be sent on request to those who have not already been supplied, but more real satisfaction will result from the use of the corner coupon below.

We hope that every doctor really interested in good drugs, in advanced methods of medication, in protecting his practice will write us in answer to this ad.

For the attached coupon, which you should mail with your enclosure, we will send you three 25c. size cans of ABBOTT'S SALINE LAXATIVE, two 50c. size of ABBOTT'S SALITHIA, and 100 W-A INTESTINAL ANTISEPTIC TABLETS, also special literature on these products, and our complete price current of alkaloidal preparations.

WE ARE READY, SUPPOSE YOU DO IT NOW!
WRITE THE MOST CONVENIENT POINT.

The Abbott Alkaloidal Co.

50 W. Broadway, New York. Ravenswood Station, Chicago. *13 Phelan Bldg. San Francisco.*

CUT THIS OFF AND MAIL WITH YOUR ORDER

For the enclosed DOLLAR send me postpaid 2 cans 50c. size Abbott's Salithia; 3 cans 25c. size Abbott's Saline Laxative; 100 W-A Intestinal Antiseptic Tablets.

DR.....

TOWN .....

STATE .....

Carolina Med. Jour. Coupon

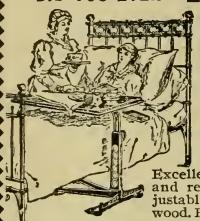
one of which the temperature returned to normal on the twelfth day, and remained permanently normal after the seventeenth day, under acetozone treatment. The clinical diagnosis was confirmed by the Widal method. In the other case the temperature became normal on the twenty-first day. Evans' opinion is that acetazone seems to cause the temperature to return to the normal more quickly than usual, to better the physical and mental condition of the patient, and to decrease the amount of toxemia from intestinal infection.

In fifteen cases of typhoid fever in which he used acetozone, J. D. Christman (*Journal of Medicine and Science*, April, 1903), failed to observe a single untoward symptom. He noticed that in a few days fecal discharges that had been putrid and very loose, began to improve in respect to odor and consistency. He expresses the conviction that in every case the patient was benefited, the duration of the disease was shortened, and convalescence was rapid. There were no intestinal hemorrhages.

The most comprehensive series of cases is that reported by Frederick G. Harris, of Chicago (*Therapeutic Gazette*, March, 1903). One hundred and twenty-eight cases were taken at random as they were sent to the wards of the Cook County Hospital. The disease proved to be of a severe type, with many and varied complications. The temperatures on admission were high. The average duration of the fever, after the administration of acetozone was begun, was 18 days in 117 cases. The fetor of the stools was greatly lessened, there was less delirium, stupor, tympanites and diarrhea. The author concludes that if cases of typhoid can be given large amounts of acetozone during the first week, regularly and at frequent intervals, with a gentle laxative, the temperature will return to the normal in ten to twelve days.

Four cases are reported by Charles Emil Brack (*Medical Age*, January 25, 1903), in which satisfactory results were obtained from the use of the drug. James Bellingslea (*Atlanta Journal-*

DID YOU EVER ENJOY A MEAL IN BED?



Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient in the sick room.

Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
300 Rose Bldg., CLEVELAND, O.

Keeley Cure

For Drunkenness and Drug Using.

Please write us. Correspondence confidential.

Our Illustrated Handbook Sent Free On Request

THE KEELEY INSTITUTE, Dept. B, Greensboro, N. C.

NEURILLA

SOOTHES, CALMS AND REGULATES THE NERVES.

INDISPENSABLE FOR NERVOUSNESS.

No bad effects follow its use.

DAD CHEMICAL CO., NEW YORK.

WITHOUT RESPIRAZONE

(Tilden's)

ASTHMA remains the BETE NOIR of Physicians.

WITH RESPIRAZONE

(Tilden's)

ASTHMA has lost its terror.

It gives prompt relief in Asthma, Hay-ever and all spasmodic respiratory dis-ases.

NARKOGEN.

(Tilden's)

HYPNOTIC, ANODYNE, ANTI-SPASMODIC.

A Step in Direction of Definite Therapeutics.

Each fluid dram contains:

Hydrate Chloral.....grs. x
Potass Bromide..... ..... grs. x
Hyoscin Hydrobromate.....grs. $\frac{1}{100}$
Narkine (Tilden's).....grs. ss

"A new Valuation of all Values."

Prepared expressly for Physicians' Prescriptions.

THE TILDEN COMPANY,

Manufacturing Pharmacists.

New Lebanon, N. Y. St. Louis, Mo.

Record of Medicine, February, 1903), f Baltimore, after an experience of wenty-five cases treated with aceto-one, confirms the statements of the bservers previously quoted. Not a ingle death occurred. Even when the atient did not come under observation ntil the disease was well established he course was materially shortened. A narked influence was exerted upon the emperature. J. J. Driscoll (*Kansas ity Medical Index-Lancet,* January, 903), who used acetozone in six cases f typhoid, found it more satisfactory han any other remedial agent. He de-lares that it reduces the fever, short-ns the duration of the disease material-, and does not seem to have any ill ffects on the heart. The feces are com-letely deodorized in thirty-six to forty-ight hours.

Joseph A. Frazier (*New England Medical Monthly,* March, 1903), re-orts a severe case with a temperature f 106 degrees, complicated by delirium tremens and intestinal hemorrhages, the favorable termination of which he credits chiefly to acetozone. The use of the aqueous solution of acetozone was continued regularly, in the face of all complications, about six pints being consumed daily.

During November and December, 1902, and January, 1903, fifty-three cases of typhoid fever were treated in the Presbyterian Hospital of Philadelphia by D. Flavel Woods and M. C. Thrush, without a single death. In their report (*Therapeutic Gazette,* June, 1903), they agree that acetozone does not seem to act upon the heart, respiratory organs or kidneys. They find that hyperpyrexia appears but rarely and relapses are infrequent when the drug is used until convalescence is fully established.

W. A. Lewis (*Alabama Medical Journal,* May, 1903), thinks acetozone an ideal intestinal antiseptic. From an experience covering nine cases, he de-

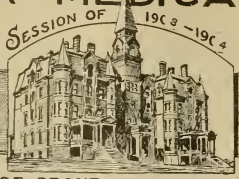
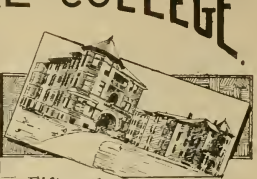
clares that its early and continuous use has a tendency to shorten the duration of the fever. This view is supported by F. W. Hicken, of Cleveland, Ohio (*Therapeutic Notes,* August, 1903), who treated with acetozone eleven cases, three of which were severe, and all recovered. He thinks it especially beneficial in those cases in which there is much tympanites.

Koch on Typhoid Fever.—The belief that the typhoid bacillus retains its vitality for a considerable period outside of the human body has been recently controverted by a number of observers, who maintain that it is only exceptionally that it exists extraneously. Sydney Martin says as result of investigation, (1) In certain virgin soils the typhoid bacillus neither grows nor lives; (2) after cultivation these soils become capable "when sterilized," of maintaining the typhoid bacillus for a limited time; (3) cultivated soil, that soil containing organic matter, when sterilized support the bacillus for a long period and the bacilli spread through the soil; (4). unsterilized cultivated soil—or in plain language ordinary garden soil—is inimical to the bacilli and the germs cannot be obtained from such soil after 12 days or so. Koch once thought this bacillus retained its vitality for a long time in water and would on reaching the soil, live and grow there for years and transplanted from thence to the human host would take up parasitic activity; he now believes that its life in water is short; that its life in moist soil containing excremented matter may last for a month or even an entire winter but not much longer; that like the cholera vibrio it is an obligatory parasite and must be dealth with accordingly. Koch holds the widal reaction to be inadequate. He favors the method of Drigalski and Conrad of using a cultivating medium which retards the growth of the intestinal bacteria, other than those belonging to the coli group. Then by agglutination test the colon group is differentiated from the typhoid; this entire method can be carried out in 24 hours and the disease recognized as early as second day. He cites recent epidemic in Trier, Germany, where the cases were caused by the infection being carried from person to person and not by water pollution. This need not lead to depreciation of cleanliness and good sanitation but emphasizes that along with these should go early diagnosis, bearing in mind the facility of this disease spreading by personal contact and that it will spread unless the excreta be disinfected. The editor of the *Record* expresses the hope that this may not lead to carelessness on part of physicians and sanitarians and that they will keep a close eye upon water supply and general sanitation.—*Abstract Editorial Med. Record.*

The New Method of Treating Typhoid Fever.—Benzoyl-Acetyl Peroxide, or Acetozone as an Intestinal Antiseptic in Typhoid Fever.—Frederick G. Harris, of Chicago, (*Therapeutic Gazette,* March, 1903), reports 128 cases of typhoid treated in Cook County Hospital, Chicago, with Acetozone. The cases first admitted seemed to indicate that the epidemic was of a mild form, but later the disease proved to be of a severe type and complications numerous. The author obtained the most satisfactory results with aqueous solutions of 15 grains to the quart, which the patients were urged to use very freely to quench the thirst, while in addition four

CHATTANOOGA MEDICAL COLLEGE

SESSION OF 1903-1904

MEDICAL DEPARTMENT OF GRANT UNIVERSITY. Fifteenth Annual Session begins in October and continues until April. New buildings. Delightful climate. Large patronage. Every facility. A full teaching corps. Laboratories with latest equipment. Modern methods of instruction. Excellent hospital. Minimum living expenses. City one of the most beautiful in America, both by nature and art. National Military Park, National Cemetery, and miles of splendid Government Boulevards. Scenic surroundings unexcelled on this continent. Requirements those of Southern Medical College Association.

E. A. COBLEIGH, M. D., Dean, Chattanooga, Tennessee.

University of Maryland

SCHOOL OF MEDICINE.

The Ninety-Seventh Regular Session will begin October 1st, 1903, and continue until May 15th, 1904. Four Years Graded Course. New Laboratory Building. Excellent Laboratory Equipment. Clinical Advantages Unsurpassed. For catalogue and other information, address

R. DORSEY COALE, Ph. D., Dean,

University of Maryland, *Baltimore, Maryland.*

University of Virginia,

Medical Department.

CHARLOTTESVILLE, VA.

The course of instruction in this Department extends over four full sessions of nine months each, and embraces a full series of didactic lectures with ample practical work in Anatomy and Operative Surgery in the Biological and Pathological Laboratories.

A Modern Teaching Hospital.

Session begins 15th September.

For catalogue, adddress . . . . . **J. M. PAGE, Chairman.**

COLLEGE OF PHYSICIANS AND SURGEONS OF BALTIMORE, MD.

Thirty-Second Annual Session will begin October 1st, 1903. New building, modern equipment, unsurpassed laboratories, large and independent Lying-in Asylum for practical obstetrics, and many hospitals for clinical work, present to the medical student every advantage. For catalogue and other information, apply to

THOMAS OPIE, M. D., Dean, Cor. Calvert and Saratoga Sts., Baltimore, Md.

When writing advertisers please mention this Journal.

to six fluid ounces of the solution was given every four hours as a therapeutic measure. The movements of the bowels were regulated with sodium phosphate or magnesium sulphate.

The temperatures of the patients, on admission, were high, as a rule. In 117 cases under Acetozone treatment, the average duration of the fever was 18 days.

The number of recoveries was 117, or 91.4 per cent., while 11 patients died, a mortality of 8.59 per cent. Statistics of the cases of typhoid fever in the same hospital (Cook County) not treated with Acetozone, show a death rate of 13.1 per cent. The author is of the opinion that under the Acetozone treatment, in favorable cases, the duration of the disease was materially shortened, and the most disagreeable symptoms were ameliorated. He declares that the characteristic fetor of the stools and the peculiar odor of the wards was greatly diminished; there was less stupor and delirium and less tympanites, and, the usual diarrhea was checked. An average of 138.12 grains of Acetozone was used in each case. Finally he reaches the conclusion that when cases can be seen during the first week of the attack and large amounts of Acetozone given, assisted by a gentle laxative, the temperature will return to the normal in from ten to twelve days.

Four cases of typhoid fever, in which Acetozone was employed with satisfactory results, were reported by Charles Emil Brack, of Baltimore (*Medical Age,* January 25th). In each case the treatment consisted in the use of Acetozone in solution. The first three patients, adults, received 30 grains of the drug per diem; the fourth, a child 4 years, received 8 grains each 24 hours. Prompt recovery occurred in each case.

James Billingslea, of Baltimore (*Atlanta Journal-Record of Medicine,* February, 1903), reported 25 cases of typhoid fever treated with Acetozone. The diagnoses were confirmed by board of health examinations. The treatment consisted in cleaning the bowels thoroughly by means of calomel. Liquid diet was prescribed, and cold or sponge baths were used as occasion required. The special treatment consisted in shaking 15 or 20 grains of Acetozone powder with one quart of water, allowing the insoluble residue to subside. The patient was given the clear solution to drink freely, the whole amount of one quart being taken during twenty-four hours. The writer suggests that one part of the Acetozone solution may be mixed with three parts of milk if thought desirable. The action of Acetozone will be materially aided by the use of a mild saline laxative.

He found that the feces soon lost their disagreeable odor by this treatment, and cold baths were required to a much less extent than with other treatment. Furthermore, the nurses universally affirmed that they found patients under this treatment easier to care for. No evil effects were noticed from the use of Acetozone.

A further contribution to this subject appears from the pen of J. J. Driscoll of Chicago (*The Kansas City Medical Index-Lancet,* January, 1903), who relates his experience in six cases. He found that Acetozone reduces the temperature, shortens the duration of the disease materially, while it does not seem to have any ill effects on the heart. The feces are completely deodorized in 36 to 48 hours and tympanites rapidly disappears.

The Fly as a Carrier of Typhoid.—An Inquiry Into the Part Played by the Common House Fly in the Recent Epidemic of Typhoid Fever in Chicago.—Alice Hamilton (*Journal of the American Medical Association,* February 28, 1903), says that the epidemic of typhoid fever in Chicago during July, August, September, and October of 1902, was more severe in the nineteenth ward, which, with one-thirty-sixth of the city's population, had over one-seventh of all the deaths from this disease. The concentration of the epidemic in this locality cannot be explained by contamination of the drinking water, or of food, or on the ground of ignorance and poverty of the inhabitants, for the nineteenth ward does not differ in these respects from several other parts of the city. An investigation of the sanitary condition of the region shows that many of the street sewers are too small, and that only 48 per cent. of the houses have sanitary plumbing. Of the remaining 52 per cent., 7 per cent. have defective plumbing, 22 per cent. water closests with intermittent water supply, 11 per cent. have privies connected with the sewer, but without water supply, and 12 per cent. have privies with no sewer connection. The streets in which sanitary arrangements are worst had the largest number of cases of typhoid fever during this epidemic, irrespective of the poverty of the inhabitants. Flies caught in two undrained privies, on the fences of two yards, on the walls of two houses, and in the room of a typhoid patient, were used to inoculate eighteen tubes, and from five of these tubes the typhoid bacillus was isolated. When the discharges from the typhoid patients are left exposed in privies or yards, flies may be an important agent in the dissemination of the typhoid infection.

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:

8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

Etiology and Serumtherapy of Hay Fever.—Dunbar shows, by a series of experiments, that the special symptoms of this disease are caused by the action of the so-called "pollen-toxin," which is a substance obtained from the pollen of various grains and plants by a process of extraction. If this toxin in watery solution is inoculated subcutaneously or instilled into the eyes of susceptible persons the characteristic symptoms of the disease are produced. Unsusceptible persons (those who have never suffered from hay fever) are in no way affected by this treatment. A long series of observations has absolutely proven this statement. The author has produced a specific antiserum by the successive inoculation of animals with this toxin. Such an antiserum absolutely destroys the action of the toxin when the two are mixed in virto. It also causes the symptoms produced by the toxin to rapidly disappear if inoculated subcutaneously or instilled into the eye of a susceptible individual shortly after such a toxin has been similarly introduced. In the above experiments the author used a pollen-toxin obtained from maize and the antiserum was obtained by the inoculation of the same toxin. Further experiments have shown that a serum obtained by the use of one variety of pollen-toxin may be active against an infection with another variety, both in vitro and therapeutically. Thus, pollen-toxin from rye is neutralized in vitro by an antiserum obtained from maize, and the symptoms produced by the rye-toxin were fully subjugated by the use of the maize antitoxin. If a similar inter-activity between the other various varieties is found to exist, the problem of producing an efficient antiserum for general practical use will be greatly simplified.—*Med. Record.*

An editorial in *Modern Medicine* of April, gives valuable space to the general treatment of typhoid, laying special stress on colon flushing. A copious enema, three to four pints of solution twice daily, morning and evening, at a temperature of 72 to 78 degrees F. The purpose of the enema is to keep the colon thoroughly emptied and thus prevent as far as possible the formation and absorption of toxic substances from the growth of the germs, the development of which is favored by the diminished resistance of the body. Glyco-Thymoline, 2 ounces to the quart of sterile water, forms a most desirable combination for this purpose.

J. N. Groves, M. D., of Effingham, Ill., writes: "The best intestinal antiseptic that I have ever used for this disease is Glyco-Thymoline, which may be given in teaspoonful doses every two to four hours, or sometimes oftener. The water restores the normal fluidity to the blood and secretions and supplies the drain, which otherwise takes place at the expense of the system. It reduces the thirst, helps reduce the fever, and maintains the patient's strength in a large degree. The Glyco-Thymoline keeps the stomach aseptic, reduces the intestinal sepsis, checks the diarrhœa and also helps reduce the fever. Of course the cold bath and other antipyretics should not be neglected if they become necessary." Glyco-Thymoline, used in a 25 per cent. solution as a mouth wash, prevents the formation of sordes, keeps the membrane of the mouth clear and adds much to the comfort of the patient.

THE PRESBYTERIAN HOSPITAL

Will Receive all Classes

Of Medical and Surgical Cases,

(EXCEPT CONTAGIOUS.)

A Full Corps of PHYSICIANS

and SURGEONS in Attendance.

Address,

PRESBYTERIAN HOSPITAL,

Charlotte, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain CACTINA, the active proximate principle of CEREUS GRANDIFLORA.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for INDIGESTION

A palatable preparation of PANAX SCHINSENG in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

JOHN R. IRWIN, M. D.,

CHARLOTTE, N. C.

Special Attention Given Surgery and Gynecology.

When writing advertisers please mention this Journal.

CHAPARRIN

IS AN ESTABLISHED THERAPEUTIC AGENT

FORMULA:

The active principles of Chaparro Amargoso in Chemical Combination with Phenol, Camphor and Salicylic Acid.

CHAPARRIN

Is pronounced the most satisfactory therapeutic agent now at the command of the profession for local treatment of skin diseases. Speedy and permanent relief follows in much less time than under other methods of treatment. Applied in sufficient strength, Chaparrin always allays itching.

ADDRESS:

The Matthewson Laboratory,

Marshall, Texas.

— IN —

ECZEMA, PSORIASIS, SCABIES AND OTHER SKIN DISEASES.

Physicians are requested to have their druggists order half dozen Chaparrin for prescription use. Prices include postage:

1 2-Oz. Bottle, =$1.00
1 4-Oz. Bottle, = 1.75
6 2-Oz. Bottles, = 4.75

MEDICAL NEWS AND ITEMS.

Almost 20 per cent. of the deaths in Hawaii during June were due to pulmonary tuberculosis.

A male child having two well developed heads was born in Burke county, N. C., a few days ago.

The plague, which is raging in Chili, is thought to have reached that country in a cargo of rice from India.

There has been no smallpox on the island of Cuba since July, 1900, and no yellow fever since September, 1901.

Yellow fever has broken out on the Gulf coast of Mexico, at Progreso, and the disease is also prevalent in Yucatan.

The University of North Carolina Medical Department opens September 7th. An increased enrollment is expected.

All the new $75,000 five per cent. bonds issued by the University of Maryland have been sold. A new pathologic building will be erected this summer.

Philadelphia's mayor has vetoed the ordinance passed by the city council granting the use of wards in the Philadelphia Hospital to graduates in Homeopathy.

We will begin in our September number a series of papers on "The Mistakes of a Country Doctor, by One of Them," that will be of more than usual interest.

Between December 27, 1902, and May 22, 1903, there have been 18,735 cases of smallpox with 617 deaths in the United States, as compared with 34,184 cases, with 1,053 deaths, during the same period of the previous year.

Prof. Dunbar, of Hamburg, claims to have discovered a toxin that causes hay

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these Preparations.

A

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

R Each fluidounce contains:

Hypophosphites Soda	.....	2 gr.
"	Lime	1½ gr.
"	Iron	1½ gr.
"	Quinine	¾ gr.
"	Manganese	1½ gr.
"	Strychnine	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate Sodium	.....	12 grains
"	Potassium	4 "
"	Calcium	4 "
"	Iron	2 "

FREE Monohydrated Phosphoric Acid 16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE.—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

C

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence o a sedentery life, coupled with nervous and mental stal strain.

Reliable Pepsin is one of the best Digestive agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating. Children, one-half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromaticmenstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable.

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50.

N. B.—We also make **25 per cent. strength.**
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

aloform, in Powder, per ounce	$1 25
aloform, 5-grain Tablets, per 100	1 25
aloform Elixir, pints	2 00
olution Albuminate of Iron, Syrup Albuminate of Iron Comp., pints	1 00
olution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

lease specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

ounded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

When writing advertisers please mention this Journal.

CATARACTS!

USE Succuss Cineraria Maritima. (BARNES'.)

Successfully used for removal of CAPSULAR and LENTICULAR CATARACTS, CORNEAL OPACITIES.

Does not cause Inflammation.

Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy:

"Mrs C—, aged 73. The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis: gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Succuss Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

Dr. Osmon Royal, under date of June 4th 1903, writes:

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Succuss Cineraria (Barnes)."

Dr. E. V. Cobb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Succuss Cineraria Maritima (Barnes).

MADE FROM THE FRESH GREEN PLANT ONLY.

$1.00 per vial 2 drachm. $3.00 per oz. by mail, post paid.

Send for literature. Made exclusively by

THE BOTANIC DRUG COMPANY,

BRIDGEPORT, ALA., U. S. A.

fever, and he has cultivated a serum that antagonizes the poison, rendering the subjects treated by the serum immune to the effect of the hay fever toxine or germ.

The North Carolina Medical College will open on Wednesday, September 2d, at Davidson, N. C. The clinical course for the advanced classes will open in Charlotte at the Presbyterian Hospital about a month later. The prospects for a large class are bright.

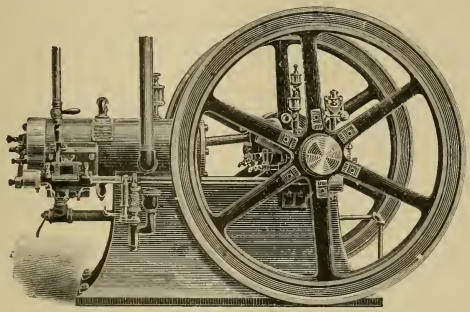
An official dispatch from Pisco, dated May 20, says that there are no more cases of bubonic plague in that city. The Board of Health then declared Pisco no longer infected. The government has officially informed foreign nations that Peru is at present free from bubonic plague.

The oldest clock in Missouri will be shown in that State's building at the World's Fair. The timepiece was brought to Upper Louisiana from North Carolina in 1800 by George Frederick Bollinger, who afterwards was a member of the first Missouri General Assembly. The old clock is 8 feet 4 inches high, and is now owned by M. V. Pabor, of Fredericktown, Mo.

The Development of Man.—Prof. W. J. McGee, chief of the Department of Anthrology for the World's Fair at St. Louis, is quoted as saying that the aim of the department will be to represent human progress from the darkness of the earliest ages to the highest enlightenment, from savagery to civic organization, from egoism to altruism. Special attention will be devoted to Indian school work, America's best effort to elevate the lower races. The method will be to use living peoples in their accustomed avocations as object les-

GAS AND GASOLENE ENGINES

Available for all Power Purposes, and built in sizes from one to 100 H. P.



THE FAIRBANKS COMPANY.

"FAIRBANKS" STANDARD SCALES.

19 and 21 Light Street, - - - - - - BALTIMORE, MD.

Write for catalogue and particulars.

ECTHOL, NEITHER ALTERATIVE NOR ANTISEPTIC IN THE SENSE IN WHICH THOSE WORDS ARE USUALLY UNDERSTOOD. IT IS ANTI-PURULENT, ANTI-MORBIFIC--A CORRECTOR OF THE DEPRAVED CONDITION OF THE FLUIDS AND TISSUES.

SAMPLE (12-oz.) BOTTLE SENT FREE ON RECEIPT OF 25 CTS.

FORMULA:--Active principles of Echinacia and Thuja.

BROMIDIA
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U.S.A.

Jefferson Medical College

OF PHILADELPHIA.

New College Building and New Laboratories.

The Seventy-Ninth Annual Session will begin September 24th, 1903, and continue eight months. For four annual sessions the curriculum provides without extra fee: 1. Practical manual training in ten different laboratories recently fitted up at heavy cost. 2. Recitations by the faculty and others. 3. Didactic lectures and demonstrations in the commodious new buildings. 4. Clinics and bedside ward work in small groups at the College Hospital, beside the clinics given by the staff of the College at the Pennsylvania, Philadelphia, German, St. Joseph's and Municipal Hospitals. 5. Lying-in cases at the College Maternity.

A New Fire-Proof Hospital, with unrivalled facilities for clinical teaching, is now building at a cost of $700,000.

For circular and information, address **J. W. HOLLAND, Dean.**

University College of Medicine,

RICHMOND, VIRGINIA.

MEDICINE — DENTISTRY — PHARMACY.

Unity — — — — *therefore*, strong courses.
Concentration — *thereby*, strong teaching.
Method — — — *therefrom*, strong students.

CATALOGUE — 100 PAGES — ON APPLICATION.

sons. Failing these in some cases, human products will be used to illustrate human progress.

Professor Alfred Russell Wallace, the eminent scientist, has an article in the *Fortnightly Review*, which persons who accept the theories it expounds will find not a little flattering to human self-conceit. Dr. Wallace reminds us that the early astronomers considered the earth the centre of the universe, but that gradually, as telescopes improved and astronomical science was perfected, the conviction grew that there were an infinite number of worlds, and that ours was probably one of comparatively small consequence in the multitude. Dr. Wallace thinks that there are not so many worlds (or stars) as has appeared. He finds that the great telescopes which reach the remoter depths of space find the stars much less numerous in those distant regions. From this he argues that the number of the stars is definitely limited. That being so, they have a center, and he suggests that the cluster of stars to which the earth belongs, being near the centre of the plane of the Milky Way, is really at the centre of the universe, as the early astronomers supposed. The probability that the earth occupies this remarkable position he finds helpful to the belief that the Creator had extraordinary intentions with regard to it, and planned, in making it the home of man, that on earth the ultimate purpose of creation should be worked out. So Dr. Wallace doubts that any other planets than ours are inhabited, and that anywhere else than near the centre of the universe could an orderly development of living souls have been attained. It is a consoling theory. Only astronomers are qualified to weigh or discuss the assuption on which it is based, but we can all hope that it is true.—*Harper's.*

Beer-Yeast in Othology.—L. S. Molist (*Rev. Cien. Med. de Barcelona,* xxviii, No. 7; *Rev. Med. News,* January 3, 1903).—That beer-yeast administered by the mouth exercises a specific effect

"THE KEY TO HEALTH."

Jackson Springs, Moore, N. C.

A health and pleasure resort conveniently located in the Long Leaf Pine section in orth Carolina, where malaria and mosquitoes are unknown. The nights are cool, the r pure and balmy. Hotel accommodations unsurpassed; hot and cold baths. Those eking amusements will find up-to-date Golf Links, Tennis Court, Croquet Grounds, en-Pin Alley, etc. Transportation facilities first-class; telegraph and express offices nveniently l cated.

Jackson Springs Water has long been used with excellent results in many chronic seases, and is considered by all who have used it as a specific in dyspepsia and indigestion. It increases the appetite, and enables the patient to digest all food taken without ouble or inconvenience in any way, thereby increasing the strength of the patient and oducing that condition of health so much desired. Catarrh of the liver, stomach or owels, where the organic changes have not been too extensive, is always benefited and any times, most miraculously cured by the use of this water. In all cases of Cystitis, not ie to stone, Jackson Springs water relieves immediately, if taken properly, and will in ort time make a complete cure. Nervousness, when not due to some organic condition, relieved at once by the use of this water, and especially is this the case when the rvousness is caused by over-work, indigestion and malassimulation. This water exercises indisputable therapeuticial influence in chronic Bright's disease, patient at once gaining strength with the power to take and digest food, and at the same time an analysis ows that the condition of the kidneys are improving.

In Renal Ca culi, Gout, Rheumatism, Uric Acid, Dethearis, Anæmia, Sleeplessness, or ain fag, Jackson Springs water may safely trusted to relieve in a short time if taken operly.

Hypernemia of the Liver, with its furred tongue, nausia, bilious, diarrhœa, sallow mplexion, headache, irritability, general feeling of depression, and malaise are very ccessfully treated by a course of Jackson Springs water.

This water possesses to a remarkable degree the power of effectively cleansing the wels, stimulating the liver and expelling poisonous matter which may have accumulated the system, and thus giving the patient a new lease on life and making him feel like new man.

Children do well here, especially those who have recently suffered from bowel and omach troubles Jackson Springs is an ideal resort for those patients convalesing from cent sickness. The water is delightfully cool and refreshing, and can be taken in large antities.

Analysis: Jackson Springs Water.

North Carolina Agricultural Department, Experiment Station.

NALYSIS No. 6,147. Raleigh, N. C., Jan. 3, 1890.

Sir:—The sample of mineral water sent to the Station for analysis, in a demijohn arke dP. M. Wilson, contains on evaporation, per U. S. Gallon—

SOLIDS.

Sulphate of Potash	.577	grains
Sulphate of Soda	.263	"
Chloride of Soda	.825	"
Carbonate of Soda	.578	"
Carbonate of Lime	1.721	"
Carbonate of Magnesia	.833	"
Oxide of Iron and Aluminum	.181	"
Sodium Phosphate	Trace	
Silica	2.567	"
Total	7.546	"

Your obedient servant,

H. B. BATTLE, [Seal.]
Director

Dr. A. C. Bethune, resident physician, is located in hotel and will be pleased to send timonials and give any other information desired.

For space and rates address

. L. BAXTER, *Manager Jackson Springs Hotel,*

Jackson Springs, N. C.

When writing advertisers please mention this Journal.

The Hopkins
Compressed
Air Heaters

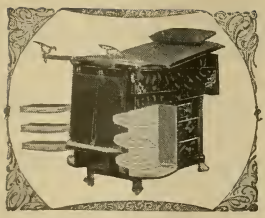
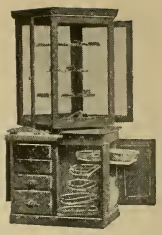
Electric Gas Alcohol

The Perfect Instrument for treatment of the ear with superheated air. Practically indestructible. Patented in all features. All kinds of special electric heaters for medical work. Write for booklet.

THE TERRY HEATER CO.,
Cleveland, Ohio.

upon pyogenic organisms in suppurative conditions is not to be questioned. The author has used a special preparation of this substance, compounded from the formula of Dr. Fita, and known as "Cerevisina-Fita," in otitis media, mastoiditis and otitis externa furunculosa, with surprisingly good results, a teaspoonful being given every four hours. The pain subsided, and the swelling was markedly decreased upon the day following the administration of this remedy in a case of mastoiditis, and by the fourth day the last remnant of the inflammation had disappeared. This method of treatment was equally successful in a case of acute otitis media, with perforation of the tympanum and involvement of the mastoid cells. Local treatment had been used three days without avail, when it was decided to try cerevisina, which gave immediate relief, and the patient was completely restored in less than a week.

Davidson, in *Virginia Medical Semi-Monthly,* advises the use of glasses, and thinks that the correction of nervous symptoms is an even more important indication for their use than the improvement of vision. The glass which accomplishes this is not always the one that gives the best distant vision.—*Jour. A. M. A.*

A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your atients. Therefore, in the selection of your equipment you should exercise great care. he testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

re the best and are adapted to all lines of regular and special practice. They are superior i workmanship and design, and include more conveniences than any other line on the iarket. (Catalogue "A" fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

A Sanatorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

Beautifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

IAPLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &C.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

When writing advertisers please mention this Journal.

Presbyterian College for Women....

Charlotte, N. C

Magnificent New Buildings. Every Essential of Health and Comfort. Good Fare Experienced Teachers. Standard Advanced. Music and Art our Specialties. Charge lower than any other School of same grade in the South.

REV. J. R. BRIDGES, D. D., President.

Elizabeth College and Conservatory of Music for Women

CHARLOTTE, N. C.

1. Is situated in the famous Asheville district, a section pointed out by the United States expert, Prof. N. S. Shaler, as having the most charming climate in the United States.

2. Has College Grounds, Buildings and Equipment worth $250,000.00.

NOTE: The site is suburban and healthful and is connected by electric car line with all parts of the city.

3. Has a College Curriculum leading to the degree of A. B., on a level with the university grade; a Music Conservatory ranking with the best in the South; and an Art Department, embracing not only drawing and china painting, but also designing, clay modeling and sculpture.

NOTE: The College has a separate, well-equipped Music Conservatory building.

4. Has a Faculty of specialists.

NOTE: Experienced teachers only are employed. Members of the Faculty represent in post-graduate study, eleven American and European Universities and Conservatories of international reputation.

5. Has a select patronage, drawn to the institution by its recognized superior advantages and not by cheap rates.

6. Has established a reputation for good health and thorough work.

For Catalogue, Address

CHAS. B. KING, President,

Charlotte, - - - - - North Carolina.

WE HELP THE PHYSICIAN
AND HE HELPS US.

Every physician knows there are times when the usual methods of treating certain diseases fail to produce satisfactory results, and then they are at a loss to know what to do.

We take great pleasure in calling your attention to

Echols' Piedmont Concentrated Iron and Alum Water,

Which is being used with such success by physicians throughout the country in the treatment of Chronic Diseases, such as Indigestion, Rheumatism, Catarrh, Female Complaints, Kidney and Bladder Disorders, Nervousness, Torpid Liver, Stomach and Bowel Troubles, Scrofula and other Blood Diseases.

Our Concentrated Water is absolutely NOT a patent medicine, but is the product of the natural water as it comes from the Springs, reduced 160 times by a process which retains all of its medicinal properties. The 20 different minerals of which it is composed are nearly identical with those found in a healthy human system, and when such a treatment is used it is reasonable to expect good results.

Over 200 Virginia physicians alone prescribe our Nature's Remedy, besides using it in their own families.

We will send an 18-oz. bottle of Concentrated Water (equal to 25 gallons of the Natural Water), free of cost to any physician wishing to test it.

For sale by druggists. 8-oz. bottles 50 cents. 18-oz. bottles $1.00.

J. M. ECHOLS COMPANY, - - LYNCHBURG, VIRGINIA.

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED IN 1881—OPENED IN 1882.

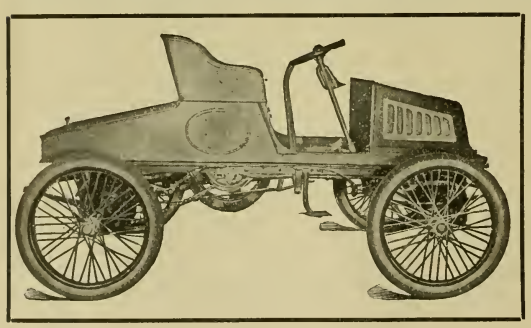
The New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant, and the hospital wards adjoin the lecture rooms. Since the fire in 1896, a new building has been erected and thoroughly equipped, and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James Tuttle, M. D.; John A. Wyeth, M. D.
MEDICINE—Isaac Adler, M. D.; Morris Manges, M. D.; W. H. Katzenbach, M. D.; J. D. Nisbet, M. D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt. H. Wylie, M. D.; Brooks H. Wells, M. D.; W. Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—August Seibert, M. D.
DERMATOLOGY—Edward B. Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O. Born, M. D.; W. E. Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M. D.; Robert C. Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederich Whiting, M. D.
EUROLOGY—B. Sachs, M. D.
OBSTETRICE—Edward A. Ayers, M. D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York

THE "ZENTMOBILE"



Where quality is desired, where comfort, durability and genuine pleasure is demanded in an automobile, this machine should be investigated before ordering.

We are all after results in an automobile, as well as everything else, and the best results are only obtained by years of persistent experimenting. We have passed through this stage. Don't buy an experiment. Get something that will require the least attention. It is a "ZENTMOBILE." - - - Get price and full particulars

SINGLE CENTRE BUGGY COMPANY, Evansville, Indiana

"No physician can afford to be indifferent regarding accurate filling of his prescriptions.

North Carolin

PROTARGOL
The Non-Irritating Substitute for Nitrate of Silver.
HEDONAL
The Promoter of Natural Sleep.
TANNIGEN
The Intestinal Astringent
LACTO-SOMATOSE
The Food for Diarrheal Diseases.
FERRO-SOMATOSE
The Ferruginous Nutrient and Tonic.
BAYER
HELMITOL
The Urinary Antiseptic, Analgesic.
THEOCIN
The Most Powerful Diuretic
Samples and Literature supplied.

MELLIN'S INFANTS' FOOD

Doctor, is your little patient happy and contented? If not, send for a sample of Mellin's Food and try it. Mellin's Food is good for babies of all ages because it adapts itself to the different conditions and requirements. Mellin's Food makes babies happy.

USEFUL BOOKLET OF FORMULAS COMPILED FOR THE PHYSICIAN FOR MODIFYING FRESH MILK IN THE HOME, WILL BE SENT YOU FREE FOR THE ASKING.

MELLIN'S FOOD COMPANY, BOSTON, MASS.

ERGOAPIOL (SMITH)

THERAPEUTIC QUALITIES

THE absolute absence of all OPIATES, NARCOTICS, and ANALGESICS, thus offering, instead of false roundabout and mere transitory relief, a true and scientific treatment for AMENORRHEA, DYSMENORRHEA, and other IRREGULAR MENSTRUATION.

In these conditions and the most obstinate cases of SUPPRESSED and RETARDED MENSTRUATION, Ergoapiol (Smith) (though devoid of the above unpleasant features, which are so often followed by a sad sequela) possesses a remarkable power to obviate pain and to bring about a healthy activity of the menstrual functions through its direct tonic and stimulating effect upon the Uterus and its appendages.

CAUTION.

To obviate Substitution or other possible error in compounding, it is advisable always, besides specifying ("Smith") when prescribing Ergoapiol (Smith), to order in Original Packages only, as in facsimile prescription appended.

These packages contain twenty capsules each, and are so constructed that all printed matter pertaining thereto can be readily removed.

℞

Ergoapiol. (Smith)--- Caps. XX.
Orig. pack.

MARTIN H. SMITH CO.,
NEW YORK, N. Y

SOLE BRITISH AGENTS:
THOMAS CHRISTY & CO.,
LONDON, E. C.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

BROADOAKS SANATORIUM.

ISAAC M. TAYLOR, M. D.

Morganton, North Carolina.

A Private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

RIO

Women suffering from an Aching Back, Bearing Down Abdominal Pains, or any abnormal condition of the Uterine system, should be given ALETRIS CORDIAL RIO in teaspoonful doses four times a day.

Rio Chemical Co., New York.

St. Luke's Hospital,

1000 West Grace St.,

RICHMOND, VIRGINIA.

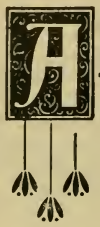
Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,

RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.



S The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our

. . . regular eleven-ounce hexagonal bottle, . . .

you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

THE ANÆMIAS

yield readily to organic, or true animal iron treatment.

A resort to *inorganic* iron preparations or tonics, serves only to stimulate corpuscular proliferation without supplying sufficient nutrition to mature the blood cells.

A preparation of **TRUE ANIMAL IRON** that will supply every deficiency in the blood, and assure the proliferation of *all* the corpuscles to a full and sturdy maturity, is found in

BOVININE

It contains **10% ANIMAL IRON,** 20% coagulable albumen, and every element of nutrition of the animal, mineral, and vegetable kingdoms.

It is readily absorbed by the tissues, requires little or no digestion, is prompt and reliable in stimulation and support, and is a nutrient of the very highest value.

BOVININE administration causes quick increase of the leucocytes, and a consequent arrest of all pathological processes.

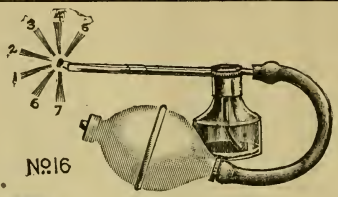
BOVININE is advertised to the Profession only, and is a strictly ethical physician's preparation. Its formula is open to all.

A postal request brings you our Hand-book on Haematherapy, giving valuable information to both the general practitioner and the specialist.

THE BOVININE COMPANY,

75 W. HOUSTON ST., NEW YORK.

DeVilbiss Universal Atomizer No. 9. All Metal.—Will throw a spray in any direction desired. Heavy oils and vaseline by heating, light oils and watery solutions without. Can be used with rubber bulb or compressed air **Price to Physicians, $1 25. Postage 6 cents.**



Two bottles furnished with this instrument. One to be used for water solutions and the other for oil.

The DeVilbiss Universal Atomizer, No. 16.—Unexcelled for patient's own use. **Price to Physicians, $1.25.** Some of the advantages of the DeVilbiss Universal Atomizers over others are:

1. They throw a spray of any kind of liquid, oils, aqueous or alcoholic solutions.
2. The point can be turned in any direction, consequently it will do the work of three atomizers of any other style without extra tips, which are liable to be lost when you need them most.
3. By closing hole in cap on bottle with the finger, a very coarse spray or stream will be thrown which serves to clean it out or can be used for douching.
4. Medicine may be mixed in the bottle by closing the hole on cap of point with the finger, and turning on air current or compressing the bulb.
5. All parts are interchangeable; any part can be replaced that may be broken or lost.
6. Our improved connection enables them to be used with either a bulb or cut-off without extra fittings.

DIRECTIONS AND GUARANTEE TO PURCHASER.

To make aceptic, unscrew hard rubber piece, place in a carbolized solution and boil metal part and bottle.

To clean Spray Tube, put cleansing solution in cup, place thumb tightly over hole in cap on bottle and by using air pressure a heavy spray will be thrown from point of tube. Should this fail to clean the tube, unscrew cap "A" and remove particles with a tooth-pick. Be sure to run it through small opening as this must be kept clean in order to have perfect atomization. Should it not work, remove point "C" as shown in illustration with a knife blade; take out all particles with a pin or tooth pick from the openings in the point and replace in the same manner as removed with the letters "UP" on the upper side. Should this fail, return to us and we will repair or replace free of charge.

DeVILBISS MFG. CO., Toledo, Ohio.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions.

PEACOCK'S BROMIDES

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.
DOSE:
One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day.

OD CHEM. CO., NEW YORK.

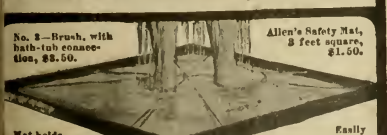
A Bath for Beauty and Health.

Allen's Fountain Brush and Bath Outfit

Friction, Shower and **Massage Combined.** The only Sanitary Bath Brush that at one operation thoroughly cleanses the skin, imparting a healthy tone and glow, and puts one in a condition to resist colds, la-grippe and all contagious and infectious diseases. Furnished either for bath tub connection, or with our fountain and Safety Portable Floor Mat. Enabling one to take a perfect spray and frictional bath in any room. With this outfit one is independent of the bath room, as a better bath can be taken with two quarts of water, than with a tub-full the old way. Insures a clear complexion, bright eyes, rosy cheeks, cheerful spirits, sound sleep. Should be in every home, and every travelers trunk or grip. Full outfit No. 2, consisting of Fountain Brush; combination rubber hot water bag; bath fountain and syringe and safety mat. Price $5.50.

Agents are making from $25 to $75 per week selling these outfits. Send for FREE booklet, "The Science of the Bath," prices and terms.

THE ALLEN MANUFACTURING CO., 429 Erie St., Toledo, O.



Valzahn Co.'s Amputating and Trephining Case.

Contents—1 Amputating Knife, 1 Scalpel, 1 Finger Knife, 1 Tenatome, 1 Curved Sharp Bistury, 1 Curved Blunt Bistury, 1 Tenaculum, 1 Grooved Director, 1 Pair Probes, 1 Trephine, 1 Tourniquet, 1 Dressing Forcep, 1 Amputating Saw, 1 Bone Forcep, 1 Needle Holder, 1 Straight Scissor, 1 Curved Scissor, 2 Pean's Haemostatic Forceps, 2 Tait's Haemostatic Forceps, 6 Needles, 1 Card Silk, 1 Coil Silver Wire, 1 Coil Catgut. All in fine Leather Case, $17.00. Knives are in Aluminum Rack removable to facilitate sterilization. **The Valzahn Company**, Manufacturers and Importers of Surgical Implements and Hospital Supplies, 132 South 11th Street, Philadelphia, Pa.

A High Tone

SHARP & DOHME'S

GLYCEROPHOSPHATES COMP.

GIVES A HIGH TONE TO THE NERVOUS SYSTEM IN

NEURASTHENIA PRESENILITY
CONVALESCENCE

IT BUILDS
TISSUES

A PINT BOTTLE FREE IF YOU PAY THE EXPRESSAGE.

SHARP & DOHME

BALTIMORE
CHICAGO – NEW ORLEANS – ST. LOUIS
NEW YORK

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

The Passing Clouds

A Small Volume of Facts and Romance by DR. D. S. MORRILL.

Issued by the Franklyn Publishing Co., of Atlanta, Ga., and mailed by them on receipt of price, $1 00.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.
Dr. W. F. Goldsmith, General Surgery.
Dr. C. C. Stockard, General Medicine and Drug Habits.
Dr. S. G. C. Pinckney, Nervous Diseases.
Dr. J. M. Crawford, Eye, Ear, Nose and Throat.
Dr. Michael Hoke, Orthopoedic Surgery.
Dr. E. C. Davis, General Surgery.
Dr. W. Munroe Smith, General Surgery.
Dr. M. A. Purse, Children's Diseases.
Dr. W. L. Champion, Genito-Urinary Diseases.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

17 W. Cain Street, Atlanta, Ga.

Table of Contents.

PAGE

EDITORIAL:

The Doctor—His Professional Sins 423

EDITORIAL NOTES:

Report of Bubonic Plague in California 425

The Therapeutics of Fresh Air and Sunshine 426

The Substituting Druggist 426

Radium as a Therapeutic Agent 427

Formaldehyde Gas as a Disinfectant 428

ORIGINAL COMMUNICATIONS:

The Study of Salpingitis: H. A. Royster, M. D., and William DeBernier Mac Nider, M D. 429

Some Mistakes of a Country Doctor: By One of Them 435

Diet in Nephritis from the Chemical Standpoint: H. W. Richardson, M. D. 437

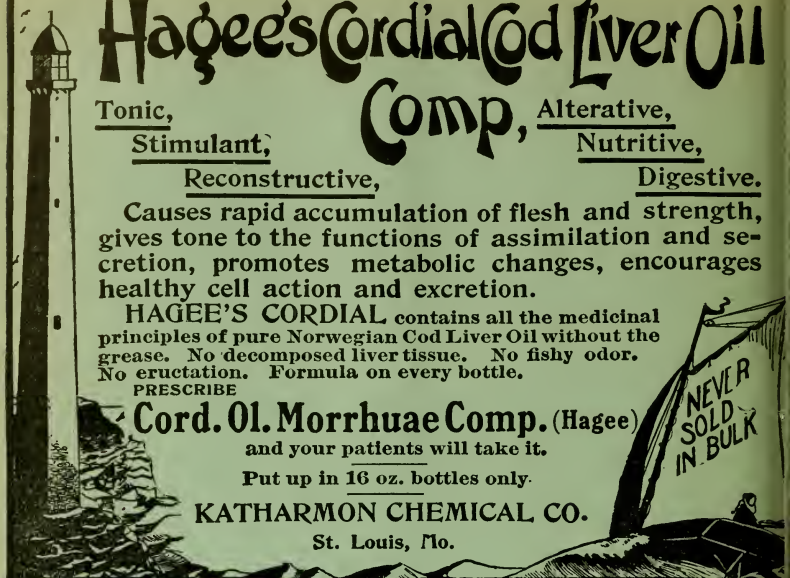
SELECTED PAPERS 439

REVIEW OF MEDICAL AND SURGICAL PROGRESS 442

BOOK REVIEWS 455

NEWER MATERIA MEDICA 462

MEDICAL NEWS AND ITEMS 469


Hagee's Cordial Cod Liver Oil
Comp,
Tonic,
Alterative,
Stimulant,
Nutritive,
Reconstructive,
Digestive.
Causes rapid accumulation of flesh and strength, gives tone to the functions of assimilation and secretion, promotes metabolic changes, encourages healthy cell action and excretion.
HAGEE'S CORDIAL contains all the medicinal principles of pure Norwegian Cod Liver Oil without the grease. No decomposed liver tissue. No fishy odor. No eructation. Formula on every bottle.
PRESCRIBE
Cord. Ol. Morrhuae Comp. (Hagee)
and your patients will take it.
Put up in 16 oz. bottles only.
KATHARMON CHEMICAL CO.
St. Louis, Mo.
NEVER SOLD IN BULK

Index to Advertisers.

	PAGE
Fairchild Bros. & Foster.....Cover	1
Parke, Davis & Co. ..... "	1
Lambert Pharmacal Co..... "	2
Mr. Fellows..... "	3
The Sanitarium..... "	4
Glycosine Phosphate Co ..... "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.	1
Martin H. Smith Co	2
Broadoaks Sanatorium.....	3
Rio Chemical Co.	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.....	5
DeVilbiss Mfg. Co.....	6
Peacock Chemical Co.....	7
Od Chemical Co.	7
Allen Mfg Co.....	7
The Valzahn Co.....	7
Sharp & Dohme.....	8
Franklyn Publishing Co.	9
The Halcyon Retreat.....	9
Katharmon Chemical Co.....	10
Mariani & Co.	11
The Antikamnia Chemical Co.	11
Oakland Chemical Co.	12
Battle & Co.	12
Kress & Owen Co.	13
The Purdue Frederick Co.....	14
Dr. Crowell's Private Sanitarium....	14
Wm. R. Warner & Co.	459
North Carolina Medical College.....	461
H. K. Mulford Co.....	463
Leukretol Chemical Co.	465
The Abbott Alkaloidal Co.....	467
A. M Ake	468
Invalids Table Co.	468
The Keeley Institute.....	468
Dad Chemical Co.....	468
The Tilden Co.....	469
Chattanooga Medical College	471
University of Maryland.....	471
University of Virginia.....	471
College of Phys. and Surg. of Balto.	471
Dr. E. R. Russell.....	473
Dr. A J. Crowell.....	473
Dr. W. O. Nisbet.....	473
Dr. W. H Wakefield	473
The Presbyterian Hospital...	475
Sultan Drug Co.	475
Dr. A. M. Whisnant	475
Dr. John R. Irwin.....	475
The Mathewson Laboratory.	476
Robinson-Pettet Co.	477
The Botanic Drug Co.....	478
The Fairbanks Co.....	479
Jefferson Medical College.....	480
University College of Medicine.....	480
Jackson Springs.....	481
The Terry Heater Co	482
W. D. Allison Co.....	483
Maplewood Sanatorium.....	483
Munn & Co.....	483
R. L. Polk & Co.....	483
Presbyterian College for Women	484
Hargrave Chemical Co.	484
J. M. Echols Co.	485
N. Y. Poly. Med. School and Hospital	486
Single Centre Buggy Co.	486

Written Endorsements From More Than 8000 Physicians.

VIN MARIANI INTRODUCED NEARLY HALF A CENTURY AGO

"The Preparation which made Coca known as a remedy!"

Priority, Facilities and Processes of Manufacture

MAINTAIN MARIANI COCA PREPARATIONS INIMITABLE.

AVOID "COCA WINES" Extemporaneously made with **Cheap Wine and Cocaine.**

Substitutes harm Patient and Physician and betray confidence in the unique properties of Coca

VIN MARIANI

Represents TRUE COCA with a Sound Nutritious FRENCH WINE;

An Adjuvant to all other Remedies in

Convalescence — Wasting Diseases — Neurasthenia

And Allied Conditions from any cause.

THE COCA LEAF

A PERIODICAL ADVOCATING THE RATIONAL USES OF COCA

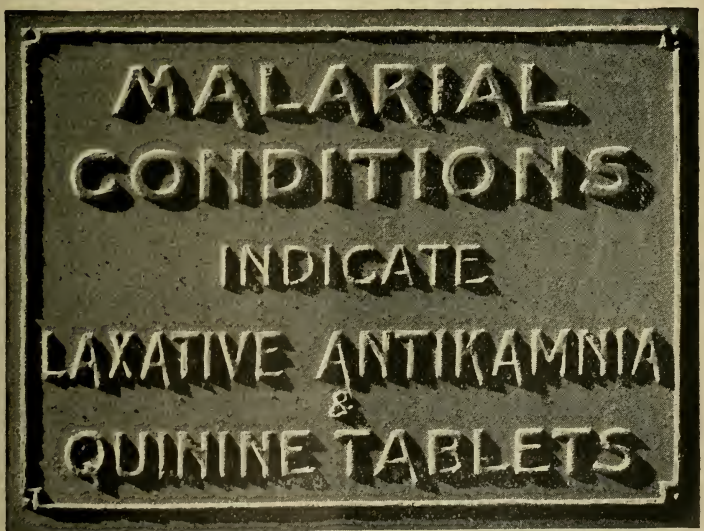
MAILED FREE TO PHYSICIANS ON REQUEST.

Inquiries from Physicians Receive Ethical Consideration.

MARIANI & CO.,

52 West 15th Street, New York.

PARIS. LONDON, BERLIN, MONTREAL. Laboratories: Neuilly Sur-Seine, FRANCE



| AK | Antikamnia & Salol Tablets
Antikamnia & Quinine Tablets | AK | Antikamnia & Codeine Tablets
Antikamnia & Heroin Tablets | AK |

When writing advertisers please mention this Journal.

BROMIDIA IS A REST-MAKER FOR RESTLESSNESS. IT GIVES CONSISTENT NERVE REST. IT DOES NOT LESSEN THE SUPPLY OF BLOOD TO ANY ORGAN OF THE ECONOMY, AS THE BROMIDES ARE SURE TO DO. IT IS A HYPNOTIC.

FORMULA:--15 grains each Chloral Hydrate and Purified Brom. Pot. and 1-8 grain each Gen. Imp. Ext. Cannabis Ind. and Hyoscyamus to each fld. drachm.

ECTHOL
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U. S. A.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

GLYCO-THYMOLINE

INDICATED
IN TREATMENT OF

Summer Complaints

ALTERATIVE
ALKALINE
ASEPTIC

——— Reports following case:

GASTRO-ENTERITIS. where there was constant vomiting. ild, twelve months old; gave one-half teaspoonful Glyco-ymoline in hot water every hour until five doses were taken, o used Enema of Glyco-Thymoline. one tablespoonful in four nces of water. This treatment gave prompt relief, and I believe ved the child's life.

——— Reports following case:

DYSENTERY: Patient. 16 months old, took to vomiting and nning off at bowels six days before I was summoned. When eached there, found the patient passing foul and bloody dis-arges, immediately put patient on Glyco-Thymoline and Liquid smuth, equal parts, teaspoonful every two hours; just after the ond dose was given I could see a marked change. Patient proved fast, and in about three days had completely recovered.

Other similar cases treated with Glyco-Thymoline gave me ually good results.

——— SAMPLES ON APPLICATION ———

ESS & OWEN COMPANY, 210 Fulton Street, New York

DO NOT FORGET

the importance of a remedy
that pacifies the irritable stomach
and intestines. This attribute of

GRAY'S Glycerine TONIC Comp.

makes it the most valuable
Summer tonic and reconstructive
in malnutrition, nervous exhaustion
and general debility.

THE PURDUE FREDERICK CO.,
No. 15 Murray Street, New York.

Dr. Crowell's Private Sanitarium

FOR THE TREATMENT OF

Alcohol, Tobacco and Drug Addictions

Special Apartments and
Nurses for Lady Patients.

S. M. CROWELL, M. D., Medical Director, 10 N. Church St., Charlotte, N.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., SEPTEMBER, 1903. No. 9

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

ubscription $1.00 per year, in advance.
ubscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
eceipts.—The receipt of all money is immedately acknowledged.
nportant Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it continued expecting to receive a remittance at their earliest convenience.
/e Notify all subscribers when their paid subscription expires.

EDITORIAL.

HE DOCTOR—HIS PROFESSIONAL SINS.

In practice the doctor is prone to fall to routine work, to go into a rut, to ollow the beaten track. It requires per-stent effort to prevent this habit. He as his favorite prescriptions, and uses nem until they become a hobby with im, or perhaps adopts some special line f treatment and looks for opportunities o use it in every case possible.

Like the boy with his painted horse n rockers, who rides away until with n extra flourish he is overturned, or, ring of his fancy, he seeks a new toy; the doctor with a fad rides his hobby o its death or its or his own detriment, nly to pick up some other fad in prac-ce.

It is said that physicians connected ith the treatment of the insane in hos-tals and asylums, become cranky on some subject in relation to the anagement of such institutions for ev-y five years of service rendered. It as hard to cure him of these cranky otions as it is to relieve his own pa-nts of monomania. The average physician does not take as long to make his hobby, and it is less persistent.

It is readily admitted that the majority of the doctors' fads are harmless as far as the results to his patient is concerned. His favorite prescription may be a good one, or his line of treatment excellent when administered properly. But all are not harmless so far as the physician himself is concerned. The uncurbed disposition is to follow the fashions of the day, and however grotesque it may appear to be placed in cold type, we do not want to be out of style, so we fall in line with the latest fads.

It may not be all true that the general public likes to be humbugged, but it takes kindly to new diseases with long and high sounding names, and the up-to-date doctor who cannot boast (of course in a quiet way, and in an entirely unobjectionable manner) of his cases of spinal irritation, neurasthenia, brain-fag, nervous exhaustion, *et id genus omne,* is simply losing a deal with his clientele. It is lamentable that we have gone 3,000 years since the Egyptians discovered the parasite producing "laziness" with-

out knowing more of it, but now that Dr. Stiles has set the pace for us, we may hope in the near future to find among our patients cases of "uncinariasis," and thus be in the fashion.

To be able to boast of these things, and especially refer to prominent individuals, gives distinction to one's practice. He is known as the man who is up to date; he is conversant with the advanced literature of the profession; these facts bring him patients of all kinds, and especially of those desiring to be afflicted with the latest high-sounding disease. If he can only succeed in hiding the fact that in most of the cases the name is but the means of hiding his ignorance, more patients will come.

As much as we may pride ourselves on our knowledge of medicine being scientific, there is still an element of humbuggery and empiricism in much of our work. But few doctors are free from it. The fad may not be exactly to our fancy; our consciences may prick us; we may condemn, in our speech, the man who does these things, and in our innermost souls have a contempt for our own actions, but if the fashion demands it we must fall into line.

These fashions are often set and more often kept up by a class of patients that demand much attention—patients of hypochondrial and hysterical tendencies, and the practice is worth something to the doctor in a financial way. They are hard to treat, are dissatisfied with self, doctor and treatment, and are continually seeking something new and unusual. They try the doctor's nerves, test his skill and exhaust his patience, until he gives up in despair.

This state of affairs is but pandering to a depraved condition of the public mind, and prostituting the practice of medicine to a base purpose. To argu that the making and holding a practic demands this course is placing commer cialism above professional standing. I is placing the profession in a false ligh before the public. It smacks of th charlatan. It makes us the laughin stock of the thinking part of the public The man of science and the quac should be a long way apart, but this con dition brings them almost in touch.

But fads are not all made or demand ed by patients. Many are the crotchet of the doctor's own brain, set up to at tract attention by oddities, attempts t follow the lead of some one eminent i his chosen specialty, ignorance, indo lence, or merely because his neighbo doctor does so.

The harm done is not so much to th patient as it is to the doctor as an indi vidual, and to the profession at large No part of the practice of medicin should be influenced by a caprice. Fad are trifling pursuits and are not in keep ing with scientific knowledge. They in dicate weakness and want of courage they hamper research; they block prog ress; they prevent investigation; the bring ridicule; they pander to a lo plane of morals; they court frivolity.

But there are two sides to all ques tions. The accumulated experience of large number of physicians, working i one direction, is an incalculable benefi A new idea promulgated by an indepen dent observer, either from laborator work or theoretical deduction, needs t be confirmed by the clinical experienc of many, before being accepted as e tablished. Investigation with a view o increasing knowledge and being bett prepared for work should be encou aged. All are not equal as observer but the practice of medicine demand that every physician should investiga

for himself, and act on his own responsibility. When so treated, the good in any new idea presented will be found, the wheat will be sifted from the chaff, and the fad become a fact in practice.

It is the blind following of a popular leadership—the doing something because others do it, the covering of ignorance by high sounding names, the heap advertising of being in the fashion, that make the doctors' fads harmful.

The evil is not a new one, but has put on strength in its growth. The itching for fame, or possibly notoriety, the competition in securing practice, and a spirit of commercialism are the prime factors in its production. The remedy lies in more candor with our patients, a higher standard of professional pride, the moral courage to tell the truth, and more original investigation.

We wish to solicit from our readers, reports of unusual or interesting cases, too brief perhaps, for a completely written paper, but suitable for recording under "Clinical Notes." Many matters of value to the profession can thus easily be recorded which otherwise will be neglected and never become available for further reference. We wish our pages to be utilized for whatever will be of benefit to the profession.

EDITORIAL NOTES.

REPORT ON BUBONIC PLAGUE IN CALIFORNIA.

Dr. J. R. Booth, of Seattle, Wash., was commissioned by the Seattle Board of Health to make a personal investigation into conditions present in San Francisco during the prevalence of bubonic plague in that city, and we clip the following from his report as published in *Northwest Medicine*:

"Chinatown proper consists of about fourteen city blocks, each block being about half as large again as an average Seattle block, and containing all together about twenty thousand inhabitants, including a few hundred Japanese. This number is much less than in former years, and still the district is congested. The houses are old and will average three stories. The men are in great majority and live in the crudest way, cooking over fires in little iron pots in dirty hallways, sometimes as many as eight or ten sleeping in an ordinary room. In the larger houses most of the rooms open upon a dark corridor, the only source from which these rooms get light and air. There are a few metallic or wooden receptacles for refuse. Toilets are used only when absolutely necessary, and the odor from the decomposing excreta in the hallways is almost unbearable. The basement dwellings are especially filthy; the alleys are all faced by dwellings, which renders a completely sanitary condition almost impossible. The streets are cobble stone paved and hard to keep clean. There is little family life, and a large percentage of the women are prostitutes. No part of Chinatown is in a sanitary condition. The district is immediately adjacent to the retail center and surrounded by a large white population, and the constant intercourse with Oriental ports will prove a menace at all times.

"It is but fair to those in authority to state that there have been but three cases of bubonic plague outside of Chinatown, and they were in the immediate

vicinity. Of the ninety-six cases occurring from March, 1900, until the last discovery, December 11, 1902, but four recovered. The Chinese concealed the sick, and only a few were discovered alive. No case resulted from a case discovered alive by the health authorities, but an infection from a culture of one so resulted at Ann Arbor, Mich. The local health department took the initiative in the quarantine restrictions. The city health department ordered a quarantine of Chinatown in March, 1900. This was lifted by order of the Federal Court in five days. Altogether, quarantine was established three different times. In all the measures they had the co-operation and assistance of the Federal health officers. I am informed that there was constant and vigorous opposition on the part of the Governor of the State, the mayor of the city, and commercial interests.

"The diagnosis was made by human cases, post-mortem examination, cultures of the bacillus pestis, and inoculations of animals with the cultures.

* * * * *

"There is an ordinance in view requiring people to vacate all cellar homes, and it is proposed to cut new streets through Chinatown and repair the old ones with material making a smoother surface for more thorough cleaning. The shipping has been directly under the charge of the city health officer. All ships leaving San Francisco have been fumigated with sulphur and given a clean bill of health. While the fumigation is going on the ship is held away from the wharf and rat guards are placed on the cables and ropes.

* * * * *

"In California and Mexico the mortality of the disease has been about 90 per cent.—about the same as has existed in the Orient. Orientals have been attacked chiefly, and are not so able to stand the disease as are the European races."

THE THERAPEUTICS OF FRESH AIR AND SUNSHINE.

The important role played by fresh air and sunshine in the cure of diseases can never be too often or too emphatically expounded. Sunshine is a wonderful help in increasing the efficiency of iron given for remedial purposes. Sunshine is entirely too much avoided. While this is advisable to avoid sunstroke, it is not usually necessary.

It is a reflection upon the intelligence of the masses that they avoid sunlight for many trivial reasons, such as damage to the complexion, the clothing, or for fear that it may prove damaging in some other way.

There is probably no more efficient or greater stimulant than a combination of fresh air and sunshine. Medical treatment should always, at least with very few exceptions, be supplemented by them. An ideally healthy life is impossible without them.—*Med.*——

THE SUBSTITUTING DRUGGIST.

The increasing urgency that physicians do their own dispensing is forced upon our minds by the existence, with fear in the majority, of the kind of druggist mentioned in the title of the editorial. The complaints of substitution by druggists are not limited to the manufacturers of proprietary medicines, as has been so often charged. The physician, whose friend the druggist pretends to be, suffers in his failure to get desired and expected results because the remedies he prescribes are not dispensed. In his acts of substitution the dru

ist, in his selfish greed, constitutes imself an enemy of the physician and nworthy of patronage or considera- on. Having no authority under the ws to treat the sick, the druggist has right under any circumstances to al- r a physician's prescription, usurping e functions of the latter. As a hu- ane being, it is his duty to notify the ysician of any error in a prescription, ll the correct prescription, and leave e responsibility where it belongs and ould belong, with the legalized prac- ioner.

There is, further, a criminal side to is question. The druggist who sub- itutes inert or inferior drugs for those escribed not only commits a dishon- t, even larcenous act; he tampers with man life, and may even be guilty of oluntary manslaughter.

Of course, there are honest and con- ientious druggists who can be relied on to fill a prescription as directed, nd these have and deserve the high- t esteem. They, however, share the probrium brought upon their profes- on by the substituting druggist.

It is not pleasant to feel, when giving prescription to a patient, that the suc- ss desired depends upon the character the druggist who will fill the pre- ription. Dispensing for himself is a fficult, almost impossible thing for e busy physician, yet, given honest ugs, his results would justify this easure. One other recourse would be prescribe only original packages or ttles of proprietaries, to insist upon . P." drugs to be added, have tests ade occasionally, and eternally black- t every druggist proven guilty of sub- tution.

No druggist has the right to arrogate himself the judgment that another ug or preparation is "just as good" as the one ordered. Your coal dealer would have no justification in supplying you, at $6.00 a ton, slaty, inferior coal, worth $3.00, at the first-named price, when you had ordered the best. If you order pure water and the dealer delivers infected, possibly sewerage water, he would be none the more criminal, rather less, than the man who would furnish inferior drugs to the sick. If the old joke of the doctors killing people is to be perennial, let them have the responsibility unmixed with gratuitous help from the druggists.—*Atlanta Journal-Record of Medicine.*

RADIUM AS A THERAPEUTIC AGENT.

Soon after the discovery of the new element radium, experiments began to test the effect of the radium rays in cancer. At a recent meeting of the Vienna Academy of Medicine, Professor Gussenbauer read a paper giving details of a case of cancer of the hard palate which was cured by means of radium rays. The patient, a man past sixty years of age, had been repeatedly operated on, but without success, the disease recurring and rendering necessary further and more extensive operations each time. After the last operation, which occurred last fall, it was decided that nothing further should be undertaken. At this time the individual was exposed to the rays, and a gradual and complete disappearance of the growth took place, which up to the present time has not returned. What the results of this discovery may mean therapeutically is hard to forecast. At present there exists only about a teaspoonful of the element, but should it prove of value in the treatment of cancer, no amount of money expended in its production would be lost.—*Medical Age.*

FORMALDEHYDE GAS AS A DISINFECTANT.

The use of formaldehyde as a disinfectant has of late years grown in popularity, having been held by the profession as the most efficacious form of disinfectant known. A writer in a recent number of the *Centralblatt fur Bakteriologie* takes exception to the generally accepted idea that formaldehyde is of value in the destruction of bacteria. From a series of experiments he found that under favorable circumstances of temperature and moisture formaldehyde yields only about 50 per cent. of positive results. Disinfection is not equable throughout various parts of a room. Where dust is visible disinfection occurs only exceptionally. Dried sputum on walls or floors is rarely disinfected. Disinfection of the floor almost never takes place owing to the tendency of the gas to rise. The writer claims that in order to make disinfection with the formaldehyde thorough it must be followed by a scrubbing with a strong bichloride solution. Should further experimentation in this regard prove the writer's assertions, we will still have to look further for the ideal disinfectant.—*Medical Age.*

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

MISCELLANEOUS.

A Useful Discovery.—For 40 years physicists have been seeking some substance to serve as a screen, cutting off all the light and heat-giving rays of the spectrum, while allowing the invisible ultra-violet rays to pass. Finally, Prof. R. W. Wood, of the Johns Hopkins University, has discovered the long-sought substance, which bears the name of "nitroso-dimethylaniline." When combined with cobalt glass, this substance furnishes a screen which allows only ultra-violet rays to pass through. The discovery is of importance for some difficult scientific investigations.

A pupil in a village school, who had been requested to write an essay on the human body, handed in the following: "The human body consists of the head, thorax, abdomen and legs. The head contains the brains in case there are any. The thorax contains the heart and lungs, also the liver and lights. The abdomen contains the bowels, of which there are five—a, e, i, o, u, and sometimes w and y. The legs extend from the abdomen to the floor, and have hinges at the top and middle to enable a fellow to sit when standing or to stand when sitting."

This question of the possibility of the spreading of infection by flies was referred to in the discussion on medicine and surgery in the Philippines, in the last issue of the *Post-Graduate.* Major Arthur spoke of the good results following surgical operations in the island and commented on the absence of flies as a possible explanation of the infrequency of septic infection.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

The Carolina Medical Journal

COLLABORATORS.

T. Bahnson, M D., Salem, N. C.
Howell Way, M. D., Waynesville, N. C.
Allison Hodges, M D., Richmond, Va.
Westry Battle, M. D , Asheville, N. C.
eo. G. Thomas, M. D., Wilmington, N. C.
P. Munroe, M. D., Davidson, N. C.
anning Simons, M D., Charleston, S. C.
C. Baker, M. D , Sumter, S. C.
R. L. Payne, M. D., Norfolk, Va.
H. S. Lott, M D., Winston, N. C.
J. W. Long, M. D , Salisbury, N. C.
H. A. Royster, M. D , Raleigh, N. C.
Albert Anderson, M. D., Wilson, N. C.
Francis L. Parker, M. D., Charleston, S. C.
Chas. W Kollock, M. D., Charleston, S. C.
Davis Furman, M. D., Greenville, S. C.
F. Julian Carroll, Summerville, S. C.
ranslation and Foreign Reviews, Richard H. Whitehead, M. D , Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.
Contributors for the Original Department of The Journal are received, with e understanding that they are contributed exclusively to this Journal.
Illustrations necessary to elucidate the text will be provided without expense to uthors when suitable ink drawings or photographs are furnished.
Scientific Articles, Clinical Memoranda, News Items, etc , of interest to the profession re solicited for publication.

ORIGINAL COMMUNICATIONS.

A Study of Salpingitis.*

y H. A. Royster, A. B., M. D , Raleigh, N. C., Professor of Gynecology, Medical Department University of North Carolina; Gynecologist to Rex Hospital; Surgeon in Charge of St. Agnes' Hospital; and William DeBerniere MacNider, M. D., Raleigh, N. C., Demonstrator of Clinical Pathology, Medical Department University of North Carolina; Pathologist to Rex Hospital.

One of the writers has been repeatedly impressed with the thought that due attention is not given by physicians generally to the clinical importance of inflammation of the Fallopian tubes and to the interesting pathology of this affection. There has seemed to be a widespread recognition and understanding of the diseases affecting the uterus and the ovary, both of which organs are possibly too often suspected without cause. It is true that uterine and ovarian diseases constitute a large proportion of female pelvic disorders; and yet, it must be remembered that salpingitis is the product of the one and the forerunner of the other, always to be taken into account when either of them are or have been present. Indeed, there are strong anatomical reasons why salpingitis should be regarded with care and deserving concern. The tube is the narrowest portion of the channel from the external genitals to the ovary, and, when once invaded by inflammation, throws it off with difficulty, even in its resolution becoming seriously damaged. Tubal infections are, therefore, more often overlooked and less amenable to timely treatment than are the same processes which attack the uterine canal.

A number of interesting cases occurring in our clinic the past winter suggested an investigation of the subject founded on both pathological and clinical observation. We present nothing new or original, for the ground has already been covered by many others. Personal experience, however, may count for something in the estimate of

*Read before the North Carolina State Medical Society at Hot Springs, June, 1903.

these matters. Clinically, salpingitis may be divided into acute and chronic; pathologically, according to whether the infective agent be the streptococcus, the gonococcus, or the tubercle bacillus. We shall treat first the acute and chronic forms, caused respectively by the first two organisms in the majority of instances, and then the tubercular variety as a separate disease.

1. *Acute Salpingitis.*—Compared to the chronic form this is an infrequent disease. It usually results from a streptococcus invasion, which is the rarest of the three common infections of the Fallopian tube. Puerperal sepsis is responsible for most cases of acute salpingitis, and, while a mixed infection may occur from the grafting of the gonococcus upon the primary condition, gonorrhea seldom produces an acute inflammation of the tube. It must be remembered, however, that acute exacerbations of chronic salpingitis may occur at any time during the course of that disease. These are the so-called cases of pelvic peritonitis, cellulitis, etc., the pathologic basis of which is the infected tube, and, unless this fact be kept in mind, no success will come in the recognition and management of such conditions. The *inflammation* in acute salpingitis is confined first to the mucous membrane, but quickly involves the whole tube, which becomes thickened and friable, while drops of pus may exude from the fimbriated extremity. These changes are usually seen in the severe cases at autopsy, as operation is seldom performed in the acute stage. The milder cases may undergo resolution and either recover or become chronic.

The *symptoms* of acute salpingitis are, briefly, pelvic pain, tenderness over the lower abdomen and fever. Since these phenomena in the child-bed cases are more or less clouded by the accompanying inflammation of the uterus, bimanual examination is unsatisfactory. We are accustomed to pursue the following course of *treatment*: Absolute rest in bed, the free use of saline purgatives and a hot pelvic pack. This latter is done by enveloping the patient's lower abdomen and hips in a sheet wrung out of hot water and folded so as to extend around the pelvis, reaching from the waist-line to the middle of the thighs. Opium is not used in any form unless absolutely necessary, and then codeine is employed hypodermatically. We place by far greater reliance upon the genital sedatives, like viburnum in large doses. No operative interference is to be considered in an acute attack unless the condition progresses rapidly or abscess formation occurs. A detailed discussion of the surgical treatment of puerperal sepsis would fall beyond the limits of this paper; but it will be sufficient to remark in passing that if a patient with a localized abscess is in imminent peril and cannot stand a prolonged operation, it is better to evacuate the pus through a vaginal puncture and to do a radical removal later, if needed. Should the patient not be *in extremis*, it would be proper to open the abdomen, remove the diseased structures and drain, when necessary, through the vagina.

2. *Chronic Salpingitis.*—Chronic inflammation is the most common of all tubal affections, and is in the vast majority of cases gonorrheal in origin, beginning as a chronic process from the start, rarely resulting from an acute attack. Very mild cases may result from extension of a benign chronic endometritis. Here, as in acute salpingitis, the changes are first limited to the mucous membrane, which becomes hyperemic

he folds are much increased by the inlammatory infiltrate and the tube is omewhat enlarged. These *changes* now xtend to the muscular coat, the fibres f which are separated by the exudation. There is a marked proliferation of cells, nally resulting in the formation of brous tissue; also of connective tissue n the surface of the tube, which unites firmly to its peritoneal investment and ncreases the thickness of the peritonum in this situation. As these changes rogress, the cilia of the epithelial cells ning the lumen of the tube disappear, he cells undergo cloudy swelling and re shed. The muscular coat becomes istended and the peritoneal coat, beides being thickened, has formed on its ree surface an exudate. Adhesions are ow brought about between the tube nd neighboring organs, as the uterus, vary or broad ligament. These adhesions are found most often about the bdominal ostium, and the ostium may e closed by such a plastering over proess, preventing extension of the inflamatory products in the tube to the abominal cavity.

In other cases when the inflammation eaches the muscular coat it becomes longated and extends beyond the fimriae, which retract and become invagiated into the tube. This is the most freuent method by which the abdominal stium is closed.

Now that the fimbriated end is sealed, he resulting changes depend upon one f two factors: 1. Whether the ostium terinum, or isthmus, remains patulous; r, 2. Whether it closes. If it is patuous, then one of the following condiions will obtain: (*a*) The contents of he tube may pass into the uterine cavy, the inflammation subsiding; (*b*) The tube may remain much hypertrohied from the infiltrate; (*c*) The muscular coat may continue to thicken and the tube become elongated and tortuous. If the isthmus is closed, cystic distention of the tube takes place and there is formed a pyosalpinx, a hydrosalpinx, or a hematosalpinx, according to whether the contents be pus, serum or blood. The shape of the tube in *pyosalpinx,* which is the earliest of these three conditions, is characteristic. It is distended chiefly at its abdominal end and more on its upper than on its lower border, giving the appearance of a retort. After a time the virulence of the organisms in the tube becomes lowered from want of oxygen and suitable food, and the production of pus ceases. The solid constituents of the pus become deposited around the walls of the tube, leaving the serum, much of which is absorbed, and there results a *hydrosalpinx. Hematosalpinx* is a rare affection, and when found, is generally the result of hemorrhage into the tube. Adhesions are often formed between the tube and ovary, surrounding the latter organ and giving to it a fibrous capsule. Degeneration of the ovary takes place, the fibrous wall is broken down and the ovary itself is infected. A direct communication is established between the lumen of the tube and the ovary, now cystic, forming the fourth and final termination in the course of salpingitis, viz: a *tubo-ovarian abscess.*

These *four lesions* are but different forms of the same disease—chronic salpingitis. All of them may be found in one woman, representing successive stages of the tubal infection. From one of our cases was obtained a most interesting specimen, illustrating three of the issues of chronic salpingitis. The uterus of about normal size had, springing from the posterior surface, a subperitoneal fibroid of the size of a lemon,

while on the right side there was a pyosalpinx and a tubo-ovarian abscess as large as an orange, and on the left a hydrosalpinx of smaller size. A complete removal of the pelvic organs was done and the woman recovered.

The *symptomatology* of chronic salpingitis is worthy the careful attention of every practitioner of medicine. Sometimes, it is to be feared, the disease is looked upon in a vague fashion without reference to its pathology or a thought as to its frequency. There are four cardinal manifestations, borne out by our experience, and, given these, the diagnosis can usually be made: 1, Pain; 2. Acute peritoneal attacks; 3. Menorrhagia; 4 Sterility.

1. Besides the common *pelvic pain* seen in other conditions, and which in this instance is notably increased by jolting and jarring of the body, there is the characteristic *tubal dysmenorrhea.* The feature of it is that the pain begins from several days to a week before the period and is not relieved by the flow, but lasts throughout the entire menstruation. This differs markedly from dysmenorrhea due to anteflexion and has been in our cases uniformly constant. 2. *Acute attacks of local peritoneal inflammation* occur either from leakage or as the result of a fresh infection of the tube from bladder, bowel or womb. If not actually present at the time, the history of such an attack previously should be definitely sought for in the clinical examination. Most often women will describe it as "inflammation of the bowels," and will mention having been confined to bed with the condition more than once. Nothing in gynecology is so certainly to be depended upon as the previous occurrence of acute exacerbations when making a diagnosis of chronic salpingitis. 3. *Menorrhagia* is another symptom which has been in our work very often present. So keenly have we been impressed with it that we suspect tubal disease always when menorrhagia is found. Not only does curettage fail to relieve the hemorrhage under these circumstances, but it is positively dangerous in the presence of a possible pus-tube. 4. Loss of the cilia and cystic degeneration of the ovaries may account for the *sterility* in these cases, though the primary endometritis is probably responsible for the greater number. Theoretically, if conception occurs, it is prone to result in a tubal pregnancy. Taking these four symptoms, together with the history and a bimanual examination, one ought to determine the existence of salpingitis.

The *treatment* resolves itself into, curing the associated endometritis, if possible, by local treatment, or, if no pus be present, by curettage with thorough drainage of the uterus; and, further, by making the woman comfortable under rest, salines and douches. The degree of suffering should be the index for advising further interference. Every woman with gross lesions, as a pyosalpinx, will need radical treatment, and, even without demonstrable lesions, surgical operation is justifiable, especially if the case has resisted milder measures. When the patient is young and anxious for children, attempts at conservative work may be made—freeing the lumen of one tube or leaving a portion of it in relation to the ovary. Under these conditions there is always the chance that a secondary operation will be required, and the woman should be acquainted beforehand with this possibility. It is needless to say that the treatment of chronic salpingitis does not presuppose the immediate removal of the tubes. Each case must be studied on its

own merits in its pathological, social and moral aspects. While most cases are not benefited by any form of palliation, radical removal should be looked upon as the last resort, unless dangerously infective lesions are present.

3. *Tubercular Salpingitis.*—Tuberculosis of the Fallopian tubes has furnished one of the most interesting and satisfactory chapters in the history of modern gynecology. A brief summary of its *pathology* as worked up by those who were the first to systematize our knowledge of the subject will not be amiss. In the first place, the condition is broadly divided into a primary and a secondary infection. The primary is less frequent and, according to Hegar, is of the ascending type, that is, it comes from below through a tubercular infection of the genital tract by feces, coitus or ulceration. Secondary tuberculosis is a much more common affection. It arises from a primary focus in some other part of the body and is of the variety described by Hegar as descending, that is, coming from above, usually through the peritoneum. By analogy from joint, bone and brain, tuberculosis infection through the bloodstream (hematogenous) must be allowed. (Whitacre.)

The morbid changes occurring in the tube as a result of tuberculosis vary widely, from the normal-sized tubes in which the tuberculous process is recognized only by the microscope—the "unsuspected tubal tuberculosis" of Williams—up to a very large pyosalpinx. In general, there are three events in the course of the condition, viz: the formation of miliary tubercles in the wall of the tube, the existence of a tumor and a progressive infection of the remainder of the genital tract. The typical condition is: a collection of grayish or transparent miliary nodules on the surface of the tube, a dilated lumen filled with caseous material and the presence of adhesions binding the tube down into the pelvis. (Whitacre.) Hegar lays stress upon two points as being characteristic in tubal tuberculosis: (*a*) a rosary-shaped swelling produced by nodules along the free border; (*b*) a dilatation at the isthmus, appearing as an extension of the uterine cornu.

From a routine examination of all tubes removed, tubercular salpingitis will be found to be much more frequent than is usually supposed. Williams considered that 8 per cent. was not too high an estimate, and he showed that many tubes thought to be simply inflammatory were in reality tuberculous. There is no doubt from the evidence that a "pre-existing gonorrheal salpingitis would pre-dispose the tube to a tuberculous infection." Although an acute and a chronic form are recognized, yet the former is not such a distinct clinical entity as an ordinary puerperal salpingitis. The best division is into a miliary, a chronic diffuse and a chronic fibroid form, corresponding, as will be noticed, to the varities of pulmonary tuberculosis.

There are no pathognomonic *symptoms* of tubercular salpingitis. They may be absent altogether or may be similar to those seen in ordinary inflammations of the tube. The patient's attention may be called to the region affected by irregularities in her menstrual phenomena—menorrhagia in the primary and amenorrhea in the secondary variety. Ascites from a complicating peritoneal tuberculosis gives specific signs of its presence. From this negative symptomatology it will be seen that the diagnosis is seldom made before operation. It might be determined by a

tubercular family taint, a primary focus in other organs or in the husband, and the history of peritoneal attacks; or, on examination, tuberculous nodules may be found, along with the rosary-shaped swelling and dilatation of the isthmus.

The repeated finding and removal of tuberculous tubes discovered unexpectedly in abdominal surgery, in addition to a clearer view of the pathology, has led to a more hopeful outlook and a more satisfactory *management* of the affection. Spontaneous cure may occur through fibroid changes and encapsulation; but when considered as a whole, operative treatment is the only rational plan in every case. Now, what are the indications for operation and what is the method of procedure? If the condition is found accidentally or diagnosed early, radical removal (salpingo-oophorectomy) should be done. The coexistence of peritoneal tuberculosis is an additional reason for operation and not a contraindication. Since such cases, as we know, are cured by a simple opening of the abdomen, the question naturally arises: should the tubes and ovaries be removed in every case? Our opinion is that they should, if the tuberculous process seems to be confined particularly to, and is more prominent in, those structures, and if their removal can be accomplished with safety. Otherwise they would much better be allowed to remain and share in the benefit to be derived from the incision and closure. Ochsner has recently pointed out that we have been doing too much to these cases, especially in the face of extensive adhesions. In our own experience there has been occasion once, at least, to regret a too radical digging of the tubes out of the pelvis, and we believe this effort hastened a necessarily fatal result. The problem of operating in cases of tubal tuberculosis secondary to phthisis is to be settled in each instance by operating, if at all, in the early cases and not at all in the late ones. Tonics, fresh air and hygiene play a large part in the convalescence, for these patients are usually thin and frail.

From September, 1902, to May, 1903, there were operated upon in our clinic at Rex and St. Agnes' Hospitals sixteen (16) cases of salpingitis. According to the nature of the infection, these were divided as follows: Gonorrheal 10, puerperal 3, tubercular 3. Without exception, the gonorrheal cases existed in the form of pyosalpinx or tubo-ovarian abscess, the clinical history in some and the pathology in all confirming the diagnosis. It is to be recalled that the pus in such cases is generally sterile and will not infect the peritoneum. In only one (a dirty tubo-ovarian abscess adherent to the bladder) was any external drainage employed, though several of the pus-sacs were ruptured in their removal. Of the puerperal cases, the first was acute; the second might be termed subacute, resulting from infection at a miscarriage six months previous, and the other was a typical chronic case showing the effects of early damage to the tubes from a former sepsis in childbed. One of the tubercular cases presented well-marked cheesy pus-tubes while the other two were complicated by tubercular peritonitis, associated with ascites. The only death in our series followed the operation on one of the last-named cases, which would have proved fatal from natural causes very soon.

Some Mistakes of a Country Doctor.

By One of Them.

Mistakes in all departments of life are often committed, and generally more easily made than corrected. The doctor in his practice is no exception to the general rule. Some are grave in character, and while the victim of our error may be hid six feet under ground, the consequences are not always so buried. Others are not so serious in their character, but all are to be avoided as far as possible.

Is the country doctor any more excusable for his errors than his city brother? He is often overworked, hasn't the time for reading and considering his cases, is deprived of intercourse with members of the profession, to a large extent deprived of aid in consultations, has to treat all character of disease, generally is deficient in books, instruments and drugs, and so is thrown much on his own resources. I do not know that he makes more errors than the town or city doctor, nor do I wish to claim more for him than that the mantle of charity shall be vouchsafed him in considering his shortcomings.

These mistakes are culled from the writer's practice, not because it is a pleasure to unearth them from the storehouse of memory, but in the hope that some fellow-sufferer may profit by his experience.

Mr. M—, a stranger to me, was brought to my office by an uncle for whom I had done some practice. He wished to consult me in regard to a small, horny growth on his 5-year-old child's face which had been pronounced by some one a cancer, but which I found to be only a wart, and so told him. I tried to allay his fears, but only partially succeeded, but finally offered to remove it, and if it returned within a year to perform a second operation without fee. To this he consented upon the advice of his uncle. The operation was performed in a few minutes and I pocketed a fee of five dollars.

A week later I met a friend who had visited Mr. M's neighborhood, when something like the following conversation occurred: "Doctor, did you cut out a tumor from Jake M's boy's face last week?" I answered that I had performed an operation on the boy. "Well, he is laughing at how soft you are. He had twenty-five dollars in his pocket to pay you for it, and you only charged him five dollars. He doesn't think you much of a doctor."

I am glad to say I don't often make that kind of a mistake, and rarely hear of it with other country doctors.

Mrs. P, aged 46, gave history of poor health, run down condition and pains in the back for some months past, but had kept up with no medical attention. Has been in bed only one day. Urine scanty and high colored, bowels constipated, tongue furred, slight fever. Pronounced it a case of nephritis. Saw her two days afterwards. Temperature 101 (morning); bowels loose; some tenderness; kidneys acting better; no special pain. Left medicines for two days, and announced that she would hardly need more than this. A week later heard that my patient was very sick with typhoid fever under the care of another physician.

My diagnosis here was too hasty and on too short an observation. Another error was in dismissing my patient while she had a temperature above the normal.

Mr. G., a strong, healthy man, at work in the harvest field, received as he thought a slight briar prick on forearm.

Several days afterwards, with no trouble during the time, the arm commenced swelling, became red and very painful. When I saw him it was much swollen, very red, and he was suffering great pain of a burning character. I was undecided between a diagnosis of erysipelas and a septicaemia. The burning character of the pain, and absence of any chills or rigors led me to pronounce it erysipelas, for which I prescribed. During the night the swollen arm pointed, broke, and discharged a large quantity of true pus. On my arrival on the afternoon of next day the swelling was reduced, the redness almost gone and my patient comfortable.

My error arose in this case from negligence pure and simple, for a palpitation of the parts would have given me fluctuation, and demonstrated the abscess.

Another case almost similar occurred in my practice. Minnie K., aged 8, has always been robust up to present time, though she is of a strumous family, mother being subject to disease of the glands, and one brother having suffered in early life with hip-joint disease, resulting in abscess, but did not learn of any necrosis. Two sisters are pale and anaemic. The patient had been away for a week on a visit and came home with a pain in one ankle. Parents thought she had been running or jumping too much. In two or three days the joint was swollen, red and painful, and I was asked to see her. I treated her for ten days for inflammatory rheumatism. She was then taken to her grandmother's, several miles away, and I did not see her for a week. The pain was very severe all the while, requiring opiates to secure rest. After the week I saw her again, diagnosed an abscess, opened it, securing relief from pain temporarily, reducing the swelling, etc and discharged my patient. Two week afterwards the father brought me small spicula of bone which he ha removed from the wound in the leg and reported that the place originall opened was still discharging pus. O course the diagnosis was clear, but wh the glistening skin, continuous pain an family history had not before this sug gested necrosis I can't understand. presume I just said it was rheumatism and stuck to my colors. I ought not t have been ignorant of these symptoms for I had treated many cases, and eve thought I was above the average coun try doctor in handling troubles arisin from a strumous diathesis.

In the early days of my professiona life I was called eight miles away to se a child, ten years of age. It was late i the afternoon, my work was pressing the roads were bad, and the night bi fair to be dark.

History of case: Generally very heal thy, only sick twenty-four hours; re tired early the evening before, withou eating supper; restless during the night complained of slight sore throat o awakening; fever rose rapidly durin the morning; pulse now 130 to minute temperature 106½ degrees; tongue fur red; bowels constipated; slight rednes of tonsils and pharynx, but no tumefac tion.

Pronounced it a case of malarial fev er; hurriedly prepared a mercurial pur gative, quinine and spirits of nitre an left, promising to return on the secon day.

On my return learned that a messag had been sent me not to come agai My patient was doing very well unde the care of another physician who ha diagnosed scarlet fever.

This mistake was inexcusable, eve

n a young doctor, as the temperate it-elf ought to have placed me on guard. The consequences of the error were far reaching, as it lost me not only the prac-ice of this family, but of several con-nections.

Diet in Nephritis From the Chemical Standpoint.

By H. W. Richardson, M. D , 212 Madison St,, W. Baltimore.

Nothing, perhaps, is so difficult to carry out in treatment as diet, and no form of therapeutics gives so little sat-sfaction to the patient or to the physi-ian. The reasons are that the physi-ian too often does not study sufficient-y the chemical principles of dietry, and s apt to prescribe a narrow diet, obnox-ous to the patient, which it is practi-ally impossible to enforce. Pawlow, n his work on the stomach, showed that here is a psychic secretion which ap-ears about five minutes after the ap-etite is excited, either by the sight of ood or by the taste; he also showed hat the more appetizing the food of-ered, the greater was the secretion of tomach juice. If this is the physiolog-cal action of appetite in health, it is vident that in disease, when the appe-te is poor and the stomach enfeebled, is of great importance to offer the pa-ient food which he likes and which will timulate the psychic secretion to the tmost, thereby procuring its digestion. f a patient with poor appetite and en-eebled digestion is offered a diet which e does not like, or perhaps which he ositively dislikes, but may take be-ause the doctor ordered it, the food will ot be as well digested nor the patient o well nourished as he would be if he ere given more appetizing food, and rther, indigestion will be produced. he failure of diet lists in treatment principally due to the fact that in-dividual tastes are not considered, the patient failing to gain strength or even losing it for want of nutrition, besides the failure of the stomach to digest the food causes indigestion with all its con-currant evils.

The saliva, the secretions of the stom-ach and the pancreas, the succus en-tericus and the bile have been shown to be intimately connected and to work in unison. As the hydrochloric acid, passing from the stomach into the duo-denum, causes increased mobility of the stomach, the pancreatic and billiary se-cretions are stimulated from the same cause, as is also the secretion of entro-kenaise, so that any form of diet which fails to call forth the proper secretion of hydrochloric acid will fail to be prop-erly digested.

To overcome this difficulty, I have been in the habit of giving the patient after each meal a lemonade to sip con-taining hydrochloric acid sweetened and flavored to taste, so that during the four hours after each meal he would take a pint or more. I have found this method answer better than giving doses of medicine, viz,, hydrochloric acid at stated intervals after meals.

In acute nephritis, the invariable rule is to place the patient on a strict milk diet, and if not kept up too long, it gives very satisfactory results as a rule, but as the quantity necessary to keep up the patient's strength is very large, and as many patients have a strong aversion to milk at all times, soon tiring of it, it is necessary to have some diet which will be more palatable, less bulky and yet not throw excessive work on the kidneys.

From a large number of analyses of the urine in the various forms of ne-phritis, I have found that certain sub-stances are difficult of elimination,

while others seem to be eliminated with ease and are present in the urine in normal quantities and in acute cases.

The substances which are eliminated with difficulty and sometimes only in traces by the diseased kidney, are water, urea, inorganic sulphates, phosphates, creatinin, pigments and hippuric acid. Those excreted with ease are uric acid, xaulhine bodies, ammonia, aromatic substances, anudo acids, chlorides, carbonates and water. The object to be attained in a diet for a nephritic must be such a one as will produce only those substances that are eliminated and a minimum quantity of those which are eliminated with difficulty.

Water is apparently excreted with difficulty in acute nephritis, and if so, a diet of large quantities of milk would be contraindicated, but I am of opinion that the cases where the elimination of water is seriously impaired are few. In many cases the reason why the water is not eliminated is because the sp. gr. of the plasma is too high and that the water is required in the sytem. The urine is small in quantity, but of a high sp. gr. and I am convinced that the administration of moderately large quantities of fluid is indicated. In these cases I have been in the habit of giving high injections of artifical serum in quantities of one to one and a half litres a day and have never seen a case where it appeared to work harmfully. In cases of oedema, which depends upon the venous congestion, I have often seen the oedema disappear rapidly after the high injections of the artifical serum, and I am inclined to think that in the large majority of cases at least, there is a anaemia of bulk. In any case, if the patient survives a day or two, the elimination of water soon increases.

The normal elimination of water of the kidneys is about 1,000to 1,500 C. M. per diem, which on a moderate diet should have a sp. gr. of about 1,010, and the object of treatment and diet should be to bring about such an excretion.

Urea is often retained, but usually only for short periods in all forms of nephritis, the reason not being evident, but there seems to be no permanent urea kidney sufficiency. Urea is considered as a diuretic and many clinicians claim to have obtained results of its administration. In any case it is easy to reduce the proteid of the diet so that the patient has only from 10.0 to 15.0 grammes per diem to eliminate.

Creatinin is formed from creatin, which is one of the extractives of meat and consequently soups, beef tea and meat extracts are contraindicated, and it is better to give boiled meat in preference to roast or broiled. In eggs and milk, creatin is only present in traces and is entirely absent from vegetables.

The pigments, urabilin and hoematophosphohyn, are formed from the hoemoglobin and are not to be controled by diet to any extent. Certain drugs produce hoemataporphorinuria notable sulphonal and trional and should on no account be given.

The phosphates are principally formed from the phosphoric acid contained in meat, yolk of egg and vegetables. The excretion of phosphates by the urine can be reduced to a minimum by the administration of calcium carbonate in from 20 to 30 grain doses per diem, the phosphoric acid combining with the calcium and forming the insoluble calcium phosphate which is eliminated in the feces.

Hippuric acid is formed from glycol and benzoic acid in the kidneys, herefore it is of importance to forbid ood containing benzoic acid, such as reen vegetables, kernel fruits and cranerries; peas and apples, raspberries nd grapes contain only traces of benoic acid. Benzoic acid appears to be rmed in the intestine from putrefacve processes to some extent.

The diet which will produce the minnum amount of the substances which re difficult of elimination by the dised kidney, can be varied according to the taste of the patient; milk, boiled meats to such an amount as to contain only about 50.0 grammes of protein or 7.0 to 8.0 grammes nitrogen. Fat in the form of cream or butter about 150.0 grammes. Rice, sago, sugar, sweet pears or apples, arrowroot, etc.

With such a variety as the above, the tastes of the patient can be consulted and a variety given which will materially aid digestion and consequently nutrition, tending to husband the strength of the patient without placing any strain upon the diseased kidney.

SELECTED PAPERS.

ucain as a Local Anæsthetic, With Illustrative Cases.

y H. M. W. Gray, M. B., C. M , F. R. C. S. Ed., Assistant Surgeon, Aberdeen Royal Infirmary. (Reprinted from The Scottish Medical and Surgical Journal, Edinburgh, August, 1902.)

The usefulness of Beta-Eucain as a cal anaesthetic, although fully recogzed in many quarters, is not sufficient- appreciated in general practice. The llowing experiences will show of how eat value it may be to general practiners, especially to those who are isoed in country districts, and who ofn have to carry out minor operations nglehanded.

Its great advantages and the number cases where it can be effectively emoyed were first proved to me in the uth African war, where a fellow civil rgeon and I were led to use it extenvely by the fact that our superior ofers were very averse to the use of loroform. This objection resulted in n being sent to the base, and taken active service, because of ailments which operation and a short stay in hospital would have obviated.

We procured some Eucain and set to work without a general anaesthetic. Our first cases were three or four varicoceles. The men were to be sent down country for garrison duty. We had most encouraging results. We were pleased; the men were pleased; our P. M. O. was delighted! The only pain felt by the patient during the operation was in the renal region while the veins were being tied—there was none during the process of exposure.

The next case was a large sublingual dermoid cyst. Pain was felt during the separation of its deeper posterior part, but "rather stand that than have chloroform," said "Tommy."

Among other cases we had varicose veins, and, among minor deformities, hammer toes, where resection of the interphalangeal joints and tenotomy of the *extensor* tendoms were done—all quite painlessly. The other patients in the ward derived much amusement, the

subject of the operation being also subject to considerable banter, a state of affairs quite reverse of that when chloroform was being used.

On taking up work at home again, I extended the use of Eucain to all sorts of cases. I have used it in herniotomy, where the patient was a cross old lady, whose only complaint was that she was being kept so long out of bed. The condition at the end of operation in such cases is not to be compared with the usual more or less collapsed condition following general anaesthesia. With Beta-Eucain the tendency to after sickness is avoided, the patient is able to take nourishment immediately, and usually has no pain for a few hours. In a radical cure it is more difficult to produce absolute anaesthesia, because one has not the definite tumor around which to inject the Beta-Eucain. It can be done, however, quite successfully. I used it in a case where the patient was afraid of chloroform. The hernia remains cured at the end of eighteen mouths, in spite of rather heavy work on the part of the patient; showing that the operation can be quite thoroughly carried out.

It was not very successful in a case of removal of cervical glands. Here it was given because the patient had on a former occasion collapsed under chloroform. Perhaps there are too many important structures in the neck to admit of the common use of a local anaesthetic there; yet Kocher's work in thyroidectomy under cocain must be remembered.

Similar want of success has occasionally attended its use in removal of growths from the face, except where the lips were concerned. This may be due to the difficulty in reaching each of the numerous interlacing nerves with the solution, where the part is so vascular and the lymph drainage so free.

Eucain has been extremely useful in cases of varicocele. A sickening pain in the loin of the side operated on was felt in the earlier cases. In the later cases, where I have not attempted to anaesthetize the deeper parts (the cord and its coverings) until the skin and subjacent fascia have been divided, this pain has been practically *nil*. In a case of castration for tubercular testicle no pain was complained of until the stitches were put in at the end of the operation, when the anaesthesia no doubt was wearing off. In this case the lungs were rather far gone, and the use of the local anaesthetic obviated any deleterious effect upon them. The skin and subcutaneous tissue of the whole of the base of the scrotum on the affected side and extending into the groin was saturated with the Eucain solution before attempting to separate out the testicle. Then a quantity of the solution was injected between and beneath the immediate coverings of the cord in various places, and in a few minutes the cord was laid bare and divided in the usual manner.

This local anaesthetic is also absolutely efficient in cases of circumcision in adults. For obvious reasons it is not so applicable in children and in those who have not sufficient mental control to remain quiet during the operation.

Eucain anaesthesia is perhaps most widely applicable and useful in the surgery of the fingers and toes. Nowadays I never recommend a patient to have a general anaesthetic for either conservative work on or amputation of these parts. It is best to make the injection at the junction of the fingers with the hand. I have seen on one occasion sloughing follow injection into the

lense tissues of the finger itself. The needle is inserted over the dorsum of the base of the proximal phalanx and pushed, just underneath the skin, to one side until it reaches nearly half way round the finger. Its point is then protruded till the skin becomes blanched and a drop of solution injected. The needle is then withdrawn a little and protruded again so as to blanch the skin, and another drop or two injected, and so on. The skin on the other side of the dorsum is similarly anaesthetized. The needle is then, through the same puncture, pushed deeply first to one side and then to the other, and drops injected at intervals as the needle is withdrawn. One should remember the course of the vessels and nerves of the finger—roughly dorso-lateral and dorso-ventral—and try to avoid wounding them, although going as near as possible to them. The palmar aspect of the finger is anaesthetized in a similar way. If the bone of the proximal phalanx is to be divided, injections should be made close to its surface. If the joints are to be opened, a drop or two injected into their cavities makes anaesthesia more certain.

Of course the part of the skin to be punctured should be disinfected, but the disinfection of the rest of the finger affected should be left till anaesthesia is established. After this preparation, removals of nails, amputations, resections, suture of tendons, removal of foreign bodies, opening whitlows, remedying deformities, etc., can be carried out quite painlessly.

I wish especially to draw attention to its usefulness in procuring thorough disinfection of crushed fingers and the like. Anaesthetize as above, then use brush, soap and water, and turpentine or spirit, as if no broken skin were present. Trim off useless parts and dress. If disinfection has been thorough the dressings need not be removed until healing is completed. Weeks of delay are thus avoided, which could only otherwise be obtained by giving a general anaesthetic to allow proper cleansing.

The usual strength of solution I have employed has been 1 to 2 per cent.; 1 per cent. is usually quite sufficient. The Beta-Eucain is dissolved in normal saline solution. By using a solution of the same osmotic pressure as the fluids in the tissues, a considerable amount of early after-pain is apparently done away with.

A great point is to inject the solution in large amount. One dram (two or three ordinary syringefuls) is quite a usual amount for an operation on a finger as above described. I have never seen any toxic action whatever, but such has very frequently followed the use of cocain even in small doses. I have heard of 15 grains of Beta-Eucain being used without bad effect.

I never make use of tourniquets in such operations. If applied efficiently they are in themselves a source of excessive pain. The advantage of the longer antesthesia gained by using a tourniquet which prevents the absorption if the anaesthetic is, to my mind, counterbalanced by this pain caused by the tourniquet. Operations suitable for Eucain anaesthesia are usually quite easily finished in the time available from one injection—this I have found is from twenty to thirty minutes, or even longer. If not, it is a simple matter to inject more where the pain is felt.

It is most important that a suitable needle be used. This should be as fine as possible, otherwise considerable pain may be caused in introducing it. Personally, I have found the needles known

as Schimmel's patent to be most convenient and humane for this purpose.

It requires a little practice before one becomes an adept in procuring anaesthesia by this method, and also anatomical knowledge of how the nerves of the part are distributed. Attention has already been drawn to the fact that it is better to inject the solution alongside a nerve rather than to inject into its substance or to transfix it; much after-pain is thus avoided. Cicatrical tissues should also be avoided, as it prevents diffusion of the solution, and is apt to slough if injection is made strongly into its substance.

A final point of no little importance is that most patients should be prevented from seeing what is being done, otherwise pain often cannot be dissociated from the use of the knife in the patient's mind. The simplest way is to lay a light towel or handkerchief over the patient's face.

In Volume II (General Surgery) of the Practical Medicine Series of Year Books, Dr. John B. Murphy, professor of surgery, Northwestern University Medical School, quotes the following

"Professor R. Matas reports (*New Orleans Medical and Surgical Journal* January, 1901), the amputation of a finger with its metacarpal bone for epithelioma by neuro-regional infiltration anaesthesia.

"Eucain B is preferred for all large or massive infiltrations, because it is only one-fourth as toxic as cocain, and can be used very freely in one-fifth of 1 per cent. solutions. As much as 8 or even 10 ounces of this solution can be infiltrated into the tissues without fear of toxic consequences. In addition to this great advantage, Eucain can stand prolonged boiling and is itself slightly antiseptic.

"The Eucain is dissolved in an 0.8 per cent. sterile salt solution. The addition of the salt is necessary to diminish the pain of the injection. Solutions of the same specific gravity and freezing point as the normal tissue fluids are the only ones that can be employed without causing pain from osmotic disturbances and are called isotonic solutions."

REVIEW OF MEDICAL AND SURGICAL PROGRESS.

Iodine Treatment of Puerpeal Sepsis.—(By W. R. Pryor, M. D., Professor Gynæcology New York Polyclinic Hospital.)—The author begins by stating that though the gross pathology of puerperal infection has been understood for many years, and recent investigations have established its bacterial causation, yet despite this fact many women die of this disease every year. Though the pathology and pathogenesis of this affection are well understood, there is much confusion regarding treatment, and the author states that the object of his paper is to help establish a correct method of handling these cases. At the outset, we must recognize that puerperal sepsis is a lymphangitis arising in the uterus and passing by the absorbents to other organs, and that the mortality is due to this propagation of septic germs at remote points, as the peritoneum, lungs heart and kidneys. Though the worst damage is done in remote organs, still the local infection point cannot be neglected. It occurs to Pryor that the treatment which sterilizes the origina

vound and allows the infected lym-hatics to absorb a potent but harmless ntiseptic and joined with it such treat-ient as promotes the eliminative func-ions, is the desired treatment. Work-ng along this line, Pryor states that, mpressed with the futility of a radical aginal or abdominal operation, he be-an in 1895 curretment of these uteri, pening broadly the posterior *cul de sac* nd packed with iodoform gauze. Ie did this at first with view of drain-ge, but soon found that there was othing to drain except serum, and yet ie results were perfect. I then had ex-minations of pelvic and uterine dis-harges made; of 37 cases operated pon, 36 showed streptococci, mixed with her germs in the uterine cavity, while l cases streptococci were found in the rum or blood lymph, or in the pus hich came from the posterior *cul de c.* This is a valuable point, that in ery case of septic endometrites strep-cocci are found in uterus and in 97 r cent. they were found free in pelvis. s to local result of the treatment, we und entire absence of cocci, often at cond and almost at third dressing, id by these large iodoform dressing e freed the pelvis from infection. The thor claims that coming in contact ith the serum of the wound the iodo-rm is broken up into iodine and meth-yl and in this form acts as a germa-le. This process is slow if pus is esent, but when brought in contact th a serous membrane, the free iodine liberated, producing local idoism and us sterilizes the pelvis. Furthermore, e author claims that the iodine pre-nts the local effects in distant organs. vestigations showed that iodine ap-ared in urine in from 2 to 5 hours; ore quickly in those cases where there s no pus to limit absorption. Entero-clysis or hypodermic injection of nor-mal saline solutions were made use of to stimulate elimination of iodine along with the toxines. The author is investigating this action of iodine as disinfectant in the blood and lymph with a view of simplifying this treatment, but these are not as yet ready for publication. Not only is mortality lowered by this treatment, but in addition the author has known three cases who have borne children subsequent to this treatment.

A Study of the Cases of Amebic Dysentery Occurring at the Johns Hopkins Hospital.—(By Thomas B. Futcher, M. B. (Tor.), in *Journal American Medical Association.*)—The author states that it was Losch, of St. Petersburg, who first described the amebæ of dysinteric stools. In America Dr. Osler first observed them in the pus from a liver abscess of a patient from Panama, which was operated on by Dr. Tiffany, of Baltimore. In Johns Hopkins Hospital during a period of 14 years, there have been 120 cases of amebic dysentery in a medical clinic of 15,000 cases. After the discovery of the bacillus dysenteriae (Shiga) it was thought that the ameba dystenteriae played only a secondary role in keeping up the process begun by the bacillus dysenteriae. But those of widest experience now claim that there is a form of dysentery entirely due to the ameba, just as there is a form due to the shiga bacillus dysenteriae. The ameba dysenteriae is a parasite belonging to the class rhizapoda of the protozoa and is a unicellular organism, in size from 8-37 microns, or average diameter of 20 microns; its body consists of two portions, the endosarc or entoplasm, the inner granular portion and the outer portions called the ecto-

sarc or ectoplasm, this being clear and hyaline in appearance. This division of the two parts is not clear in the quiet stage, but is distinct in active period. The greater part of the body consists of finely or coarsely granular endosarc and often contains vacuoles of varying size, while a nucleus can at times be found in the fresh, unstained specimen and usually in the stained specimen. The ameba frequently contains red blood cells, may reach 15 or 20 in number; also micrococci, bacilli and granular debris. Red cells are more numerous in acute cases. Motility is the most striking characteristic of the ameba and may be a change of shape or a change of place; change of form is of two kinds, the first of which is the protrusion of a pseudopodium from the hyaline estosarc, which in a few moments is attracted into the body again. The other motion is the sudden throwing out of a process from the ectosarc, which in a few moments completely encircles the cell. The movements of locomotion are interesting and seemingly purposive in character and consist of the throwing out of a process from one border of the body of the parasite when the granulae endosarc with its contents quickly flows into the process. By throwing out these processes the organism can in a few seconds carrry itself across the field of the microscope. It is often difficult to distinguish between endo- and ecto-sarc; as a rule, the more acute the process the more active the amebae and in a good specimen of mucus the entire oil immersion may be filled with the moving bodies. Cold retards movements, 75 degrees stopping them; on heating they recur and live indefinitely in a warm stage; 1 to 5,000 solution of quinine at once stops activity and during death vacuolization of the cells occurs. Ameba staining is unsatsifactory, theonin and basis aniline stains being the best; thionin differentiates from mastzeller, which they resemble. There is "an encysted form" of the ameba which, like the gaumete form of malarial parasite, is thought to be necessary for the transmission of the disease. Amebe may be found in healthy individuals or in those affected with chronic diarrhœa, intestinal tuberculosis, typhoid fever, without producing dysenteric signs. There are three types of ameba. 1. Ameba intestini vulgaris, non-pathogenic to man or cats. 2. Ameba colinitis, pathogenic for man and not for cats. 3. Amebe coli pathogenic for both man and cats and producing dysentery in both. Usual site of bacillus the large intentine though it may be found in the liver (from abscess) or peritoneal cavity (from rupture of abscess) or mouth or lungs and sputum (from rupture of abscess). Source of ameba and mode of infection not well known, but most likely through mouth to gastro-intestinal canal.

Geographical source shows that it is not confined to tropics, for of 119 cases 83 were contracted in Baltimore and some as far north as New England. There are three clinical types: 1. Dysentery of mild intensity; 2. gangrenous; 3. chronic form. Infection of liver arises through the portal vein. Diagnosis is made by finding the bacillus in the stools; stools should be kept warm or examined at once after being passed. In constipated form, or any form for that matter, it is most satisfactory to pass up rectal tube and get piece of mucus for examination. Select the blood stained mucus. Use the low power first and recognize the ameba by their being

arger than the intestinal epitheleal cells nd may even see the ameboid move- nents by this power; if you find large, aried, non-motile body, may be rea- onably sure of dysentery; best, how- ever, continue search until motile or- ganism is found. Positive diagnosis of epatic abscess will depend on finding meba in matter taken from liver by eedle. I a patient with hepatic ab- cess begins to expectorate "anchovy auce" (reddish brown) suspect hepato- ulmonary abscess. Treatment of dys- ntery should consist of high injections f solutions of quinine; patient in knee- hest position and begin with 1-5000 nd gradually increase to 1-1000 or -500; put in one quart twice daily and e sure to get high up as seat of trou- le is in ascending colon and caecum.

What is a Cold?—It seems almost ab- urd that, after the experience of cen- uries, such a question as the above hould still need to be asked. But it ertainly is necessary, since no adequate efinition of it has been furnished, and hose which are usually current are ost widely divergent, and agree only pon one point, the theory of causation nplied in the name—and this is prob- bly untrue.

Whatever may be the essential cause f a cold, it is almost certain that a mere owering of the temperature is not. Men and women who are most exposed o low temperatures suffer least from olds. Arctic explorers, hunters, min- rs, lumbermen in the great woods, all ill go through an entire winter, or for series of years be exposed to the most rrific vicissitudes of temperature, and ever develop what is commonly known s a cold. All of them, on the other and; after they return to civilization, ill promptly develop a "cold in the head," and will snuffle, sneeze and cough as they never done in their en- tire period of exposure. Such was the experience, for instance, of Nansen on his return from his two years' expedi- tion in search of the North Pole. Dur- ing the whole of this time he never had a cold, but, within five days after his return to civilization, both he and his companion, Johanssen, were attacked by violent colds in the head.

Upon a recent visit to Eastern Wash- ington we found an illustration of the same experience. A foreman of a lum- ber camp, who had been spending the greater part of the winter in a rough logging shanty up in the Blue Moun- tains, with two or four feet of snow on the ground, had never had a single touch of cold or cough, but at the time we saw him he was whooping, sneezing and coughing in a most typical manner, from a violent cold contracted within 48 hours after his return to civilization, and this he assured us had occurred with him at least three times previously.

Ever since the days of Dr. Jornson it has been known that the population of one of the Faroe Islands never had colds except upon the few days of the year when a ship would be able to enter the harbor; when within 48 hours after its arrival the inhabitants of the entire island were sneezing and coughing.

Within the past year our brilliant and energetic *confrere,* Dr. Lawrence Flick, has added similar testimony, in the experience of his admirable hospital for the tuberculous poor near Philadelphia. In order to min- imize the vivid dread of "catch- ing cold," which patients usually ex- press when subjected to the full rigor of the open air treatment, he has de- clared a cold to be an infectious disease, and that all visitors should be rigidly

excluded from the hospital who are suffering from one. The result has been an entire freedom from "cold-catching" on the part of the patients, until a few months ago, when a severe outbreak of sneezing and coughing occurred. Upon investigation this was readily and clearly traced to the admission to the hospital of a butcher who was suffering from a severe could in the head, which was not discovered until after his admission within the doors of the institution.

Everything at present writing, in fact, seems to be pointing toward the view that a large percentage, at least, of what we commonly call colds, are infections, pure and simple, whether by the influenza bacillus, or by some more common and less actively virulent "domestic" organism.

Certainly all of us can readily recall seeing a "common cold" run through, practically, every member of the household, or even institutions, and has seen a single visitor infect an entire household, or a single scholar a school.

In our judgment, most cases of cold, of any degree of severity, ought to be treated as infectious, and the patient confined to his, or her, room during at least the acute period of their course, as this would not only prevent many of the serious pulmonic and other complications which are apt to follow a cold, but would also assist in checking the spread of the disease. Certainly all school children suffering from well-marked colds should be sent home until they have recovered.

Infectious Colds.—According to the *Hospital,* many experiments have been undertaken to satisfy the medical mind that a thing that most people outside our profession have always taken for granted—namely, "colds"—are catching. That they are catching no one now doubts. It is recognized by those who have the management of sanatoria for consumptives that one of the great disadvantages attending the visits of friends is that "colds" are introduced, much to the detriment of the patients. Of course, every lady knows that "sniffly" people are as well avoided when social functions are on hand, and now a serious question is being asked—namely, should a doctor visit his patient when suffering from "cold?" In the ordinary daily life of those who go out into the world and take their chance of all infections, who ride in trains and omnibuses, and even go to church, the opportunities of infection are so many that is is probable that one more is of no moment. But to the chronic invalid, shut off rigorously from external influences, the visit of a catarrhal person may undoubtedly be productive of injurious results. If ever this view should be seriously taken by the public—and they are kittle cattle to shoe, that same public—no one knows what fancy they will take up next. The matter might become a very serious one, not only for medical men, but for those sick insuance societies which profess to give so much a week to medical men while incapacitated by illness. What is meant by incapacity?

Observations on the Mechanics of Digestion.—W. B. Cannon gives the name of "rhythmic segmentation" to the process by which, in the small intestine, the food is mixed with the digestive secretions exposed to the absorbing wall and carried forward. This muscular activity begins in the duodenum, in which a mass has accumulated after repeated relaxations of the pylorus. Suddenly irregular movements occur about the

mass, and then, at regular intervals along its length, constrictions of the circular fibres separate the mass into a number of equal portions. Hardly have the constrictions thus occurred when similar constrictions begin to appear about the middle of each segment. As these new constrictions deepen, the first constrictions begin to relax. Finally, when the new constrictions have completely divided the segments, the first constrictions have entirely relaxed and the neighboring halves of the divided segments unite to form new segments in the region of the first constriction. Now these new segments are again divided by circular constriction about their middle, and neighboring halves of these divided segments unite to make a third series, and so on. This process of rhythmic segmentation of the food may go on for several minutes in the duodenum (at the rate of thirty divisions per minute in the cat), so that the food, coming from the stomach, becomes thoroughly mixed with the outpouring secretions of the liver and the pancreas. It is usual for the process to be brought to an abrupt end in the duodenum by active peristalsis. A persistaltic wave forms behind the mass of food and sweeps it swiftly forward through several coils of the intestine.—*Jour. A. M. A.*

The Value of Breathing Exercises.—Hoffman (*Therapeutische Monatshefte*, 1902, No. 10) urges systematic expiration as the best prophylactic or curative treatment for emphysema. The emphysematous patient in his desire for air does not take time for expiration because of the rapidly following inspiration, and his respiratory force gradually becomes weaker and weaker; therefore, before the disease is advanced too far, and whilst the breathing apparatus still retains its strength, the patient should for a quarter to half an hour every day practice deep exhalation. In case of insufficient expirations a rhythmical pressure on the thorax may be employed to alleviate the condition. The abdominal viscera are affected in an important manner by deep respirations, due to the movement of the diaphragm and the abdominal muscles; it affects the liver, and to a less degree the other movable organs, subjecting them as it were to an internal massage. The resulting pressure also acts on the veins, promoting venous return. The intestines are also activated; thus deep breathing is of value to those suffering from habitual constipation. In cases of syncope it is an excellent remedy. In threatened sea-sickness it improves the cerebral circulation; it also facilitates the return flow of blood from the abdominal organs, and has a marked psychic effect on the patient.

Prophylaxis in Chloroform Narcosis.—Feilchenfeld (*Centralblatt fur Chirurgie*, 1903, No. 6-7) advises the use of cardiac tonics before narcosis. He administers them only in cases of nervous irritable hearts with normal diffuse impulses and a small, rapid pulse. He gives tincture of strophanthus in doses of five drops with or without tincture of digitalis; this usually brings about slowing of the pulse and has a quieting effect on the patient. In case of diseased myocardium, lack of tone, and arrhythmia, infusion of digitalis or hypodermic injections of strychnine may be used; in such cases, however, ether narcosis is to be preferred. In cases of hypertrophy it is important that the narcosis should be supported by morphine injections. In severe forms of myocarditis

little is to be expected from prophylaxis, and the threatening danger of the narcosis should always be borne in mind.

Spinal Anesthesia: A New Method.—The distressing symptoms of vomiting, headache, dyspnoae, perspiration, and fever, which accompany or follow the anesthesia produced by the injection of an aqueous solution of cocaine into the spinal canal, are, according to Kozlowski (*Centralblatt fur Chirurgic,* November 8, 1902) due directly to the irritating effects of the water and drug. These symptoms persist in many cases for a week or more, and form a clinical picture which the French surgeons have designated "aseptic meningitis."

Of the numerous methods tried the only expedient of any value is the substitution of tropacocaine for cocaine. One operator has employed an aqueous solution of tropacocaine in sixteen cases of spinal anesthesia. In nine of the cases symptoms of vomiting and headache without temperature elevation were experienced in four to six hours after injecting the solution, but in the remaining seven cases no unpleasant symptoms whatever developed. The analgesia was perfect in every case.

Kozlowski's observation led him to believe that the reaction following this method of anesthesia is not due to the poisonous properties of the tropacocaine, but to mechanical or chemical irritation of the cerebrospinal meninges produced by the solution. Inasmuch as the tropacocaine is practically non-irritating, he concluded the reaction must be due to the well known irritating properties of the water, to be avoided by substituting for the water cerebrospinal fluid as a vehicle for the tropacocaine.

Guinard has reported on seventy cases of spinal anesthesia produced b this method in which none of the case displayed any disagreeable symptoms a a result of the anesthesia. Guinard in jects a drop of concentrated aqueous so lution of cocaine after first diluting i by means of cerebrospinal fluid with drawn from the patient.

Kozlowski's method consists of firs weighing out 0.05 gramme of dry pul verized tropacocaine in a dry, warm sterilized glass dish. He then intro duces the hypodermic needle betwee the second and third or between th third and fourth lumbar vertebrae an allows 5. grammes of cerebrospina fluid to drop on the tropacocaine. B shaking the glass dish, the tropacocain completely dissolves and forms a 1 pe cent. solution in the cerebrospinal flui without the addition of any water. Thi solution is sucked up in the hypodermi syringe and injected into the subara chnoid space. Tropacocaine (Merck's has been employed directly from th original bottle without any previou sterilization. Pulverized tropacocaine i sterile in itself, and any attempt at ster ilization is unnecessary, provided stric aseptic precautions are taken to pre vent its contamination.

The method is simple, easily carrie out, and is not time consuming. Mos important of all, it occasions no un pleasant symptoms.

More frequent employment of spina anesthesia, both in hospital and privat practice, is advised by Kozlowski, wh looks upon the danger connected wit the procedure by his method as bein not much greater than that of a needl puncture.—*Ther. Gazette.*

Vital Force the Result of Electri Forces.—About a year ago Professo Jaynes Loeb startled the scientific world

by his statement that the vital force of life comes from the electric forces and the food which is eaten and not from heart. Prof. David J. Single, also of the University of Chicago, makes in a recent lecture an equally startling announcement. He states that it is not only a sodium chloride which stimulates and causes heart action, but that oxygen gas is often a more important factor in sustaining heart action. While experimenting with a strip of turtle's heart which he was moving from a vessel containing sodium chloride, he noticed that the beating of the strip was greatly increased when it came into contact with the air. Noting this he experimented with a piece of the ventricle of a turtle's heart. When it ceased to beat he put it in a solution of salt and then put the strip into a jar of oxygen gas. Here the beating was sustained for 72 hours.—*Med. Times.*

A Case of Cancer of the Larynx Cured by the X-Rays.—(W. Scheppegrell, New Orleans, *N. Y. Med. Jour.*, December 6, 1902.)—The growth was observed in a male patient, 57 years of age, who complained of hoarseness for six months, which was gradually getting worse. The mouth and pharynx were normal, and the tumor involved the left wall of the larynx, and the cord on the same side. There was also a paralysis of this cord. No enlargement of the cervical glands were observed. Seventy applications of the X-rays were carried out in succession. After this period of treatment the mass that had projected into the lumen of the larynx had disappeared, including also a large portion of the left vocal cord, which had been diseased. All difficulty of respiration had disappeared and also the pain. Expectoration was still present, but had lost its purulent character, though occasionally streaked with blood. Ten further treatments with the X-rays were given, at the end of which time the ulceration in the larynx had healed. Two months later no return of the disease was observed and the patient had resumed his practice of law. No syphilitic history was obtained, though a therapeutic test was made with negative results. No microscopical examination of the growth was made, as the diagnosis was made from the clinical history and laryngoscopic examination.—*The Laryngoscope.*

A Note on the Therapeutic Value of Adrenalin.—J. Gray Duncanson (*British Medical Journal*, February 21, 1903) reports the following case:

H——, male, aged five years. In May, 1901, falling on a sharp stick held in his hand, the right tonsil was penetrated, making a ragged wound, which would admit the end of a black leadpencil, but was of no great depth. Bleeding was profuse, and the blood, pale brown in color, did not coagulate. An hour after the accident the child was pallid and inclined to faint. Tr. ferri perchlor, 2 parts and liquid hamamelis 1 part on wool was applied freely and held in position; plugging was impossible. The bleeding being a rapid oozing, it was not possible to ligature any vessels. With local and general treatment the boy made a good recovery in eight weeks; at first his condition was very critical, with profound anemia and constitutional disturbance. Latterly he took Hommel's hematogen with marked advantage. Some months later he had a severe attack of epistaxis, which was easily controled by plugs of gauze soaked in adrenalin solution 1 in 1,000.

On September 13, 1902, he collided

with a perambulator, and the pointed end of a brass rod struck him at the middle of the upper orbital ridge on the left side. The mother thought the wound insignificant, and having some adrenalin solution, applied it on linen, and as the bleeding almost at once ceased, did nothing further.

On September 16th alarming bleeding occurred, and the child was seen by the writer on September 17th, at 1 a. m. The upper and lower left eyelids were swollen and deeply ecchymosed; there was a small irregularly shaped punctured wound, with edges showing no signs of healing, in the middle of the left eyebrow; from this blood was pouring out in a steady stream. There was little or no coagulative power in the blood. A plug of gauze packed into the wound passed in a downward direction for three-fourths of an inch, and in no way controlled the hemorrhage; to pack tightly was impossible owing to the situation. The author then soaked a piece of double cyanide gauze in adrenalin solution 1 in 1,000, and passed it round the wound, packed in a fresh portion treated in the same manner, and bandaged tightly with a pad over all. In sixteen hours he renewed the plug, and again in another twenty-four. No further bleeding took place, and the wound granulated up in ten days. The boy is a hemophilic, and the history of the two accidents treated by the old and the newer methods is striking.

Hot and Cold Water in Eye Diseases.—Nance states in the *Medical Standard* for December, 1902, that the principal points in the consideration of this subject may be thus briefly summarized:

1. Heat and cold are best applied to the eye by moist pads. They are more efficacious when employed in this manner than by means of the coil or bladder, in that their action is more penetrating, and their effect is more germicidal.

2. The application of heat is indicated in degenerative corneal processes —interstitial and phlycetenular keratitis, corneal ulcers, pannus, infected corneal wounds, hyphemia, hypopyon, suppurative panophthalmitis, in iritis and cyclitis, in muscular spasm, and in contusion and ecchymosis of the eyelids ("black-eye") to hasten absorption of extravasated blood.

3. The applications should be of the highest temperature the patient can endure, viz., 110 to 135 degrees F.

4. They should be employed for a period of fifteen minutes, and repeated at intervals of two or three hours, for many hours.

5. Cold is indicated in hyperemia and inflammation of the conjunctiva. In purulent conjunctivitis it is the remedy *par excellence*. In traumatisms, especially those of the iris and lens, and in the early treatment of contusions of the lids, its employment is of value.

6. In purulent conjunctivitis iced applications may be continuously used for many hours so long as the cornea remains unimpaired, in which instance they are positively contraindicated.

7. Hot applications greatly assist the rapid absorption of various medicants employed in ophthalmic practice, and when used for this purpose should immediately precede the instillation of such solutions.—*Ther. Gazette.*

The Treatment of Infantile Convulsions.—The causes of infantile convulsions, according to G. J. Ellis (*New York Medical Journal,* March 14, 1903) are of two kinds, direct and reflex. The

irect are the acute infections, in which ie initial chill observed in older pa- ents is often replaced by a convulsion; xhausting diseases, such as continued iarrhœa; toxic causes, such as drug oisoning and uremia; central lesions, ich as tumors, embolism, thrombosis, emorrhage, meningitis, hydrocephalus, erebral syphilis, etc.; and diseases of convulsive character, such as tetanus, ilepsy, and pertussis.

The reflex causes are very numerous, nong them being indigestion, intes- al parasites, foreign bodies in the ear d nose, dentition, and mental disturb- ce, such as fright. Rachitic infants particular are disposed to an attack convulsions on the slightest irrita- n. It is generally impossible to de- rmine the cause while the convulsion present. The prognosis should be arded, for though the cause may be ivial, death may occur from exhaus- n or from spasm of the glottis.

The warm bath and mustard plas- rs, applied to the nape of the neck, igastrium, and soles of the feet, are vorite home remedies. Small time ould be wasted on these if they do t act quickly. The best remedy at r command is chloroform, a few ops of which inhaled from a hand- rchief relieve almost instantaneously. ie intestinal tract should be thorough- emptied, first by an enema of warm ap-suds, and then by calomel and so- , one-tenth of a grain each, repeated ery hour until free purgation occurs. hould the stomach be suspected to con- n irritating matter, syrup of ipecac, hich is found in nearly every house- ld, may be given. A child one year d may take a teaspoonful every 20 nutes until emesis occurs. Any re- rrence of the convulsion is checked th the chloroform. High tempera- ture indicates the application of an ice-cap. Exhaustion indicates stimulants, preferably alcoholic for infants. Muscular twitching or restlessness should be quieted by sodium bromide and chloral. Ten grains of bromide and five grains of chloral may be given in twenty-four hours for a child one year old.

The after-treatment depends on the cause. Any disease should be treated, the feeding regulated, and if no cause can be discovered, the bromide and chloral mixture should be continued.

Some Improvements in the Method of Local Analgesia.—A clinical lecture with the above title, delivered at University College Hospital, London, July 11, 1903, by Arthur E. J. Barker, F. R. C. S., Eng., appears in *The Lancet* for July 25, 1903.

Several points must be borne in mind, among them the mechanical and physical difficulties in infiltrating all the nerves supplying an extensive field of operation. To inject the whole area so as to reach all its nerves would mean in many cases the use of much more of the toxic drug than is necessary, and in some cases so much as to be dangerous.

The author refers to certain observations by Braun, of Leipsic, on a method of overcoming the drawbacks incident to the usual mode of producing local anesthesia. This method is based upon the old experience that *anything which retards or diminishes the circulation of the blood in a part enhances the potency of the analgesic agent.* Experiments were made with Adrenalin, a very small quantity of which was injected with B-eucaine (or cocaine) into the author's own arm, and subsequently into the arms of numerous patients. After the lapse of twenty minutes the part was

quite blanched and wholly insensitive to pain, remaining so for about two hours. Adrenalin, alone, used in this way had no analgesic effect, while the results of the use of the combined solutions of B-eucaine and Adrenalin were far superior to those produced by B-eucaine alone.

The most convenient way to prepare the solution is as follows: Powders, each containing 0.2 gramme (3 grains) of B-eucaine and 0.8 gramme (12 grains) of pure sodium chloride are kept in thick glazed paper, ready for use. When needed one powder is dissolved in 100 Cc. ($3\frac{1}{2}$ fluid ounces) of boiling distilled water, and 1 Cc. of Parke, Davis & Co.'s Solution Adrenalin Chloride is added when the fluid is cool. The solution is left in the Jena glass beaker in which it has been boiled, which is carefully covered and placed in a vessel of warm water to keep it at blood heat.

The injection is made by means of a simple syringe of glass and metal of 10 Cc. capacity, with rubber washers, which can be sterilized by boiling.

To illustrate his method the author describes in detail the performance of an operation for the radical cure of inguinal hernia.. The hernia is first reduced and the index finger is thrust into the external ring as far as possible. Along this finger the needle is entered and the inguinal canal is filled with 10 Cc. of the solution. An endeavor is made to inject it all around the neck of the sac so as to reach the genital branch of the genito-crural nerve. The needle is then entered at the external end of the line of incision in the skin, and is made to infiltrate the *superficial* layers of the latter down to the root of the scrotum, making the resulting wheal at least an inch longer at each end than the incision is to be. Injections are then made at a point half an inch to the inner side of the anterior superior spine of the ilium, the needle being thrust towards the ilio-inguinal nerve, and at a point about one inch above the middle of Poupart's ligament where the ilio-hypogastric nerve is most conveniently met. Then the thigh is flexed and another syringeful is injected along the ramus of the pubis and the root of the scrotum or labium.

It is necessary to wait twenty minutes after the last injection for the full effect of the Adrenalin to develop. The whole field of operation should be blanched and insensitive to pricks but not to touch—analgesia, not anesthesia. The incision may then be made with confidence that no pain will be felt. The absence of oozing of blood is noticed. Only large vessels bleed at all.

Success depends upon a mastery of the principles and practice in the details of the method. It is not enough to inject the fluid under the skin generally. Due regard must be had to the position and course of the nerves supplying the structures to be dealt with. The Adrenalin compound, by slowing the circulation through the part prevents the anesthetic agent from being rapidly washed away. The writer has used this method in thirty operations, including the radical cure of hernia, strangulated hernia, orchidectomy, removal of varicose veins, psoas abscess, loose body in knee, tumor of neck (actinomycosis), colotomy, Thiersche skin grafting, and cystic adenoma of the thyreoid.

The Modern Therapy of Septic Puerperal and Surgical Infections.—(By Roswell Park, M. D., LL. D., Professor of Surgery, University of Buffalo. Abstracted from the Alpha Omega Delt

ulletin, March, 1903.)—The most fficient measures for the treatent of surgical infections are the varius silver preparations for whose introuction into surgical and obstetrical ork we are indebted to Crede, of Dresen. We have been for decades looking vain for an effective antiseptic which devoid of marked toxic or irritating roperties. Allotropic silver (Collorgom) seems to offer us the nearest approach thereto. Between this silver reparation, which is so bland, and the lver salts, like nitrate of silver, there e the lactate and citrate of silver, also troduced by Crede, of which reasonly strong solutions can be used upon ite sensitive surfaces without produc- much if any disturbance.

Let us first take the aqueous solution soluble metallic silver (Collargolum) hich in the strength of 1 to 500 in stilled water makes a somewhat udy solution. In this strength it may used by intravenous injection in ses of severe general or puerperal psis, rapidly spreading gangrene, ute articular rheumatism or other seris infections. In fact, solutions as rong as 1 to 100 may be employed; it ing desirable to introduce 6 cg. (.9 ains) to 10 cg. (1½ grains) at least. there be difficulty in injecting it into ein it may even be given beneath the n. Unpleasant effects will not be noed, neither will any immediate relief flow, but the solution thus introduced ming into contact with the blood, hich in these cases is swarming with rms, will promptly begin its bacterial work, whose effects should be nifested after two or three hours by fall of temperature and amelioration septic symptoms. Silver used in this y has been of great service in cases carbuncle and even of acute anthrax. Moreover, its administration may be repeated as often as may seem necessary.

When metallic silver is made into a suitable ointment (Unguentum Crede) which, by the way, much resembles mercurial ointment, and is then applied to the skin, there is a rapid absorption of the silver itself with its dissemination into the blood stream and results like those just mentioned. It is simply a somewhat slower method of introducing it into the system. For many years I held and taught that the combination of resorcin, ichthyol and mercurial ointment, which I believe I introduced into surgical practice, was the most effective remedy for the treatment of erysipelas and all similar septic infections. Today I have found but one combination which I think superior for this purpose, and that is the silver ointment, Unguentum Crede. I believe that its properties are more marked than those of the ointment which I so long used. No matter what part of the body be annointed, absorption takes place readily and promptly, consequently any convenient surface may be medicated in this way. Cleanse the skin thoroughly, smear the ointment freely over the surface, cover the area with oiled silk, and put over this, if comforting to the patient, a warm application to promote absorption. If the surface be not tender, the ointment may be rubbed in. In cases of puerperal sepsis it may be applied over the abdomen or to the inside of the thighs. In erysipelas it should be applied to the affected part. It makes very little difference what the exact nature of the infection is, one may rely upon it that the silver will be absorbed and will do good work. This is true for instance, in such acute infections as endocarditis and meningitis.

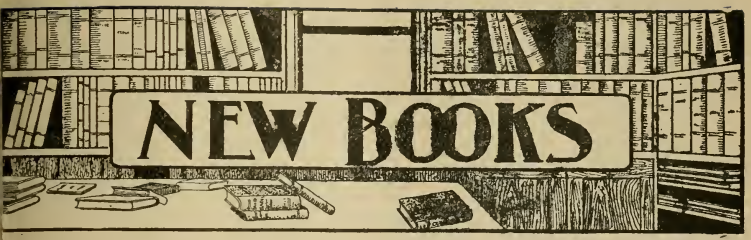
Advantage may also be taken of the properties of metallic silver by giving it

internally as an intestinal or urinary antiseptic, for which purpose it should be given in pills or capsules. These are unirritating and extremely efficient, and may be given where remedies like salol, benzosol, etc., are ordinarily exhibited.

Lastly I would speak of the use of lactate and citrate of silver, not only for such purposes of the preparation of catgut, silk, gauze, etc., but in solutions of from 1 to 300 to 1 to 500 for the irrigation of septic cavities, and for such purposes as washing out the peritoneal cavity in cases of tuberculous peritonitis, for which I have repeatedly used it and always with benefit. I differ with my friend, Dr. Fenger, of Chicago, now dead, who did not favorably regard washing out the abdominal cavity in these cases. In my own experience, in several instances, a flushing of that cavity with a 1 to 500 solution has been of the greatest apparent benefit and has never occasioned any regret. Infected bladders, uterine cavities and vaginas may be advantageously, freely and frequently washed out with similar solutions. When using them one may have the feeling that he is using solutions of greater efficacy and of far less toxicity than any of the mercurial preparations would afford. Therein lies the beauty of these preparations, that in anything like equal strength they are more effective and much less toxic than the mercurial salts.

This is a very brief epitome of my views regarding the value of the silver preparations in surgery. I often state in my clinic that the good, old-fashioned nitrate of silver is not used nearly so much as it should be, and prove the strength of my conviction by its general use in 1 to 10 per cent. solutions in pus cavities. Not only is a full germicida effect obtained, but also that stimulatior to healthy granulation which the nitrat is well known to afford. All in all, if I could have but one source for antisepti solutions and applications I would rather look toward the preparations o silver than in any other direction.

Chronic Inflammation of the Pharyngeal Tonsil Without Interference With Nasal Breathing.—(Wm. R. Murray Minneapolis, *Northwestern Lancet,* September 1, 1902.)—Typical cases of ade noids, producing mouth breathing, ar faily well recognized, but Murray call attention to cases in which there i chronic inflammation with little or n hypertrophy, and offers the following conclusions: (1) That a chronic in flammation of the pharyngeal tonsi may exist without any obstruction t nasal respiration. (2) That many case of post-nasal catarrh are due to th presence of a chronically inflame pharyngeal tonsil. (3) That som cases of acute and chronic otitis media have their origin in an eustachian sal pingitis, which was due to a low grad of inflammation of the pharyngeal ton sil. (4) That in the treatment of som cases of chronic otitis media the sourc of the trouble may be overlooked, an that no permanent improvement wil follow until the underlying cause be re moved. (5) That if the presence of chronically inflamed pharyngeal tonsi were more generally recognized, an more thoroughly removed, there woul be fewer cases of chronic otitis media.— *Laryngoscope,* Feb., 1903.



URGICAL DISEASES OF THE ABDOMEN, WITH SPECIAL REFERENCE TO DIAGNOSIS.—By Richard Douglas, M. D., Formerly Professor of Gynecology and Abdominal Surgery, Medical Department Vanderbilt University, Nashville; ex-President Southern Surgical and Gynecological Association; Fellow of American Association of Obstetrics and Gynaecologists; Member British Gynaecological Association, etc. Illustrated by Twenty Full Page Plates. Philadelphia. F. Blakeston's Son & Co., 1012 Walnut St., 1903.

The writer of this volume on surgi- l diseases of the abdomen, has been teacher and practical worker in this ecial field for eighteen years. Dur- g this time he often felt the need of a ncise, yet comprehensive treatise to ve light on the various diagnostic roblems which arose; in absence of is he was forced to find what he anted in journalistic literature; this nsumed valuable time and often, here files were incomplete, was not haustive. With the end in view of pplying this want, he has, after a orough study, prepared the volume hich is before us. The methods pre- nted are only such as have borne the st of practical usefulness.

Eighty-nine diseases are covered in this volume, being discussed in a direct and forceful way from clinico-pathologic, as well as from a pathologico-diagnostic point of view; many authorities array symptom-groups and do not discuss their pathological bases; the author strives to link symptoms with pathological causation, which is essential to intelligent comprehension of disease. The author keeps this important point well in mind, and we can safely say, has made a valuable contribution to recent literature and has furnished very valuable and instructive matter for the practitioner, who seeks methods and information upon which he can rely. The publishers have done their duty well; the plates, type and binding are excellent. Those who are interested in surgical diagnoses will do well to read this work, so full of practical, every-day information.

THE INTERNATIONAL MEDICAL ANNUAL.—A Year Book of Treatment and Practitioner's Index, 740 Pages; 1903, Twenty-first Year. New York, E. B. Treat & Co., 241-243 West 23d Street. Chicago, 199 Clark Street. Price, $3.00.

With this issue the Medical Annual reaches its twenty-first year—a good indication of its continued popularity. Its ideal has remained unchanged, i. e., to

present in a single volume a reflection of the knowledge of the year, and to make that reflection true.

The present work is fully equal to the high standard set by the editors of previous years. There are 34 contributors to this edition, many of whom are well known. The arrangement and classification of the subjects is excellent, the photographs and diagrams adding much to the exposition of the text.

The general summary of the year's work, which is commenced in this issue, will be found useful. There is an interesting and instructive chapter on "X-Ray's Use in Medicine and Surgery," including a discussion of the "Finsen Light Treatment." Among the other subjects may be mentioned surgical treatment of cirrhosis of the liver, diagnosis of hip joint affections, sanatorium treament of phthisis, etc.

GYNECOLOGY.—A Text-Book for Students and a Guide for Practitioners, by William R. Pryor, M. D., Professor of Gynæcology in the New York Polyclinic Medical School; Attending Gynæcologist New York Polyclinic Hospital; Consulting Gynæcologist St. Vincent's Hospital, New York City Hospital, and St. Elizabeth's Hospital; Member Fondateur Congress International de Gynæcologie et d'Obstetrique; Fellow of the American Gynæcological Society; Fellow New York Academy of Medicine. D. Appleton & Co., Publishers, 436 Fifth Avenue, New York.

This is a new work, written especially for students, and also for practitioners who desire to possess a practical, clear and concise work upon this subject.

The volume is profusely illustrated with many original drawings, made under the direct supervision of the author at the New York Polyclinic College and Hospital. The author has an excellent style, and his extensive experience enables him to speak with a directness of personal tone, which will impress his instructions upon the minds of his readers.

Dr. Pryor is one of our Southern men who went to New York early in

WILLIAM R. PRYOR, M. D.

life, and by sheer force of merit has attained marked distinction as a practitioner and teacher of gynæcology.

As a writer, he has the rare faculty of eliminating all non-essentials and presenting the subject clearly and concisely.

Furthermore, Dr. Pryor's personal equation is all that can be desired. The book has so many good points worthy of notice that it is hard to select, since only a few can be mentioned.

As is well known, the author is partial to the vaginal route for pelvic work but he gives due weight to the value of the abdominal route and points out with discriminating judgment the indications for both methods.

He emphasizes the value of his position for pelvic work and examination of the bladder. This position roughly described, is the Trendelenberg position with the thighs flexed sharply on the abdomen instead of being extended, and the legs hanging over the end of the table. The author justly condemns the knee chest position for replacing the retroverted fundus.

In the treatment of puerperal fever, Dr. Pryor pronounces as "dangerous" and "mischievous" both antistreptococcus serum and curettage. His method, which is characteristic of him in boldness, consists essentially in first curetting, then packing the uterus and the pelvis, the latter through a posterior vaginal incision, with iodoform gauze. He asserts that he has never lost a case treated this way. For particulars, the reader is referred to the book, page 1, *et sub.*

The author very properly puts great stress on laceration of the cervix as being a cause of cancer.

Figure 41 is a striking illustration of the author's method of direct cystoscopy without the use of mirrors or head lamps.

The writer would take exception to Dr. Pryor's statement, in speaking of the treatment of ureteral calculus, in which he says: "If it (the calculus) is impacted in the pelvic ureter, transperitoneal uretero-lithotomy is indicated." (By far the best method to which there are few exceptions is to make a lateral incision going behind the peritoneum.—J. W. L.)

The chapter on "Conservative Operations on the Uterine Adnexa" and "Management of Patients After Caeliotomy," are worth far more than the price of the book. Indeed no practitioner who sees many gynæcological patients can well afford to omit Dr. Pryor's book from his library.

J. W. Long, M. D.,
Emeritus Professor Gynæcology and Pediatrics in the Medical College of Virginia.

International Clinics.—A Quarterly of Illustrated Clinical Lectures and especially prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pædiatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose, and Throat, and other Topics of Interest to Students and Practitioners by leading Members of the Medical Profession throughout the World. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, U. S. A., with the Collaboration of John B. Murphy, M. D., Chicago; Alexander D. Blackader, M. D., Montreal; H. C. Wood, M. D., Philadelphia; T. M. Rotch, M. D., Boston; E. Landolt, M. D., Paris; Thomas G. Morton, M. D., Philadelphia; James J. Walsh, M. D. New York; J. W. Ballantyne, M. D., Edinburgh, and John Harold, M. D., London, with Regular Correspondents in Montreal, London, Paris, Leipsic, and Vienna. J. B. Lippincott Company, Philadelphia and London. Cloth, $2.00. Volume II, Thirteen Series.

Volume II, thirteen series, of the International Clinics, maintains the high excellence subject matter which has always characterized this publication. The symposium of six articles on summer diarrheas of children, is full of valuable information, and brings the subject well up to date. The articles on diseases of the pancreas, by Opie and Deover, are of much merit and commanding interest. It is useless,

however, to speak specifically of the articles under the various headings of treatment—medicine, surgery, pediatrics, obstetrics, gynaecology and ophthalmology—all of which are from the pens of eminent authorities, and we would commend strongly the regular reading of these volumes as they appear during each quarter of the year.

PROGRESSIVE MEDICINE.—Fifth Annual Series. Volume II, June, 1903. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 427 pages with 46 Illustrations. Per Volume, $2.50, by express prepaid. Per Annum, in four cloth-bound Volumes, $10.00. Lea Brothers & Co., Publishers, Philadelphia and New York.

Volume II, June, 1903, number of Progressive Medicine, covers recent progress in surgery of the abdominal viscera, gynecology, diseases of blood and ductless glands, hemorrhagic diseases, diseases of metabolism and opthalomology. While all of the matter in this number has been correlated by men of note, the section on the blood is from the hand of Dr. Alfred Stengel, and is most especially commended. Caley's article on surgery of stomach, intestines and liver contains much that is practical to the surgeon, is most handsomely illustrated and reflects credit upon both writer and publishers. We would not fail to call the attention of ophthalmologists to the contents of section on ophthalmology by Dr. Edward Jackson.

KING'S MANUAL OF OBSTRETRICS.—By A. F. A. King, M. D., Professor of Obstetrics and Diseases of Women, in the Medical Department of the Columbian University, Washington, D. C., and in the Medical Department of the University of Vermont. Ninth edition, revised and enlarged. In one 12 mo. Volume of 628 pages, with 275 illustrations. Cloth, $2.50, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

This, the ninth edition of "King's Manual of Obstetrics," will doubtless be as readily taken as those preceding it. There is no work extant which presents in a clearer and more practical form the essentials of obstetrics, especially adopted to the needs of students who are laying the foundation for broader studies and to practitioners who desire "the meat" of the subject in an easily accessible form. The amount of practical information is great and it is stated without superfluous words. There are a number of new plates, rewritten articles among the latter being the one on "Puerperal Septicaemia." The binding and typographical work are very pleasing to the eye.

WHAT A YOUNG BOY OUGHT TO KNOW—The First Book in a Self and Sex Series to boys and men, by Sylvanus Stall, D. D. Vir Publishing Co., 1134 Real Estate Trust Building, Philadelphia. Price, $1.00.

This admirable little book handles a difficult subject in a delicate way. It is scientific, but can be understood by a child, and is as readable as a fairy story. For purity, clearness and intensity it is without a rival in literature.

The Sumbul Series

No. 2

In our advertisement of Series No. 1 we gave some valuable formulas and expatiated on our expert experience in preparing Sumbul, at the same time dilated upon the therapeutic value of the drug.

We reiterate there are none so good as

WM. R. WARNER & CO.'S.

The following recipes may interest our readers

TABLETS TONO-NERVINE

WARNER

Ext. Sumbul,	1-2 gr.
Phosphorus,	1-100 gr.
Ext. Damiana,	1 gr.
Ferri Carb.	1 gr.
Asafetida,	1-2 gr.
Ext. Nux Vom.	1-10 gr.

In each tablet.

A VALUABLE TONIC

TONO SUMBUL CORDIAL

THE IDEAL TONIC

12 oz. bottles only.

—FOR—

PHYSICIANS PRESCRIPTIONS

PIL. SEDATIVE

WARNER

℞

Ext. Sumbul,	1-2 gr.
Ext. Valerian,	1-2 gr.
Ext. Henbane,	1-2 gr.
Ext. Cannab. Ind.	1-10 gr.

In each pill.

A VALUABLE SEDATIVE

Specify Warner & Co. when you prescribe and avoid disappointments

WM. R. WARNER & CO. MANUFACTURING PHARMACEUTISTS

PHILADELPHIA NEW YORK CHICAGO NEW ORLEANS

its class. There is universal need for a book of this kind, and it should be read not only by every boy, but by every man, preacher, mother and especially by every teacher in the country. To what extent and in what way teachers in the public schools should impart information upon this subject, depends upon the tact of the teacher and the conditions in the community; but that every teacher should be intelligent upon this subject of personal purity for boys and girls there can be but one opinion. This book has been read and is commended in highest terms by such persons as Dr. Theodore L. Cuyler, Joseph Cook, Josiah Strong, Bishop Vincent, Anthony Comstock, John Willis Baer, Mrs. Alice Lee Moque, Drs. Kate Waller Barrett, Mary A. Livermore, and many other equally prominent persons, and we desire to add our heartiest editorial approval and commendation.

FENNER'S TWENTIETH CENTURY FORMULARY now ready. This work, on which the author has been engaged during the past three years, is finally completed and is being sent out to its great number of subscribers as fast as it can be finished by the binders.

It is ten years later than any other American pharmaceutical compend, and contains all the important matter published during the past thirty years in the eleven editions of Fenner's Complete Formulary, together with a great number of formulas and much valuable information never before published, making it an invaluable work for druggists and those engaged in the manufacture of medicines and allied preparations. No drug store or pharmaceutical establishment is complete without this new work. It contains 1,620 large octavo pages, and is substantially bound in leather. Price $10.00—no discount. For further particulars, address E. Fenner, Westfield, New York.

THE INCREASED COST OF LIVING.—Perhaps the most interesting discussion or resolution that was heard during the sessions of the educational convention in Boston, in July, was the separate and unofficial declaration of the 80 New York school teachers in favor of larger salaries. Practically the whole body of the salaried class feel severely the pinch of prosperity, so to say. The cost of living has been greatly increased. The housekeeper shudders as she compares her present weekly bills with those of a few years ago. All sorts of meat, poultry, and vegetables are almost too high to look at. The income is the same; the outgo is many per cent in some cases and localities as much as 50 per cent., more than it was. The laborers strike or their wages have been voluntarily increased. The salaried man and woman have to bear it, but feel a little aggrieved. There is no "strike" for them, but they cannot help being struck by the meagreness of their slice of the general boom.—*Everybody's Magazine.*

EVERYBODY'S "BEATS."—Dame Fortune seems to smile on the efforts of the young men who are at the helm of *Everybody's Magazine.* They have scored a third magazine "beat" in the September number, with a character study of Joseph Pulitzer, who, at the moment, is the most conspicuous personality before the American public.

Their first "scoop" was an article on Thomas Wallace Russell and the Irish Land Bill, in June, when everyone was talking of the new era for Ireland.

The August issue was on the new

North Carolina Medical College

DAVIDSON, N. C.

SITUATION—Heathful, moral, conducive of study.

STANDARD—Equal to any College of the South.

RECORD—Excellent as shown by the high standing of our graduates.

EQUIPMENT—Seven Laboratories, Three Hospitals, Two General Dispensaries.

CLINICAL INSTRUCTION---On the modern plan.

CHARLOTTE CLINIC---A superbundance of material.

FACULTY---Strengthened by ten of Charlotte's leading Physicians and Specialists.

INSTRUCTION---By "quiz method" and laboratory work.

PHENOMENAL GROWTH---From 11 to 67 students in 10 years. From 4 to 17 Professors in 10 years.

For further information and Catalogue

Address

J. P. MUNROE, M. D.,

DAVIDSON, N. C.

stands a few days after the Pope's death with an article, by Marion Crawford, on "Pope Leo's Successor." It was the expression on the subject of the man best fitted to give the facts, and the degree to which it was quoted in the newspapers shows the value set upon it by men who are the real judges of timeliness.

The article on Joseph Pulitzer is peculiarly illuminative of the man's character and his ideals of newspaper making. In the light of his present extraordinary endowment of a College of Journalism at Columbia, it affords an interesting index to the line of thought of which that is the culmination.

Joseph McCulloch, of the St. Louis *Globe-Democrat,* once defined great editing as the art of knowing what would happen two months in advance, and having the best man on the spot to write of it.

Recent issues of *Everybody's Magazine* come nearer filling this definition than anything else in current magazine making. It also illustrates the theory of the publishers that timeliness is as important in a magazine as in a newspaper.

NEWER MATERIA MEDICA.

Germ Destroying and Nerve Soothing.—The following excerpt from an article in the *Virginia Medical Monthly,* by Stephen J. Clark, M. D., No. 66 W. 10th street, of this city, plainly outlines the useful combination of two leading remedies in materia medica:

"Binz claims specific antiseptic powers for quinine; other writers are in accord with him on this point, and report good results from large doses in septicaemia, pyaemia, puerperal fever and eryesipelas. It is a germ destroyer of the bacilli of influenza (la grippe). Antikamnia and quinine tablets will promptly relieve in this disease. Quinine is a poison to the minute organism, sarcina; and antikamnia exerts a soothing, quieting effect on the nerve filaments. A full dose (two five grain tablets) of this remedy will often arrest a commencing pneumonia or pleuritis. These tablets are also useful in the typho-malarial fever of the South —particularly for the hyperpyrexia— both quinine and antikmania, as previously said, being decided fever reducers. They are likewise most valuable in cases of periodical attacks of headache of non-defined origin; of the so-called 'bilious attacks;' of dengue; in neuralgia of the trigemini; in that of 'ovarian catarrh;' and, in short, they are effective in every case where quinine would ordinarily be prescribed and without the 'ringing' which generally accompanies the administration of quinine alone."—*New York Medical Journal.*

Bovinine in Consumption.—From the prevailing disbelief, which was almost a despair, the recent knowledge that consumption is curable is rapidly disseminating.

This is not due of any miraculous medical specific that has appeared, or ever will appear; nor to climate alone for cases originate in California, Colorado, the Riviera, and the most noted resorts of the Swiss Alps; but it is accomplished by the rapid restoration of tissue-waste with nutrition that contains all the elements of the human

MULFORD'S GLYCERINIZED VACCINE

"ALWAYS TAKES"

Yields **100%** SUCCESSFUL VACCINATIONS IN PRIMARY CASES

Supplied in complete outfit containing scarifier, bulb for expelling lymph from capillary tube and 10 tubes of Glycerinized Vaccine . . . **$1.00**

MULFORD'S VACCINE ALWAYS TAKES

Literature mailed upon request
Supplied by all reliable druggists

MULFORD'S VACCINE ALWAYS TAKES

H. K. MULFORD COMPANY

CHEMISTS

Philadelphia New York Chicago

body, in right proportions and ready for immediate assimilation, to enable the system to build faster than the malady can break down.

While it has been abundantly proven that the *tubercle bacilli* is often the means of perpetuating consumption, it never has been satisfactorily demonstrated that it is the sole cause of the disease. No doubt every human being in the civilized world is sooner or later exposed to this germ, but only a small minority are susceptible to its infection. The great majority are immune by virtue of normal vigor, normal nutrition, which does not furnish the nourishing nidus for this bacillus.

The long and feverish search for a drug that shall demonstrate its right to be called a specific has been almost abandoned. The thousand and one alleged "cures" or specifics for consumption have all proved cruel delusions. Tuberculin is a sorry example. Creosote, cod liver oil, guaiacol, and all their derivations and modifications have signally failed. Recent searchers have confined their efforts mainly to the field of antagonizing serums, but instead of reaching favorable results, it looks as though the whole serum theory would, ere long, be abandoned as a mistake.

There is no positive cure for consumption outside of an element or influence that restores normal nutrition, that enriches the blood and builds the tissues. This being accomplished, Nature does the curing. The sooner we all accept this demonstrated fact that general vital recuperation, by whatever means it may be accomplished, is the only cure that is scientific, that has ever been known or ever will be known, the less time we will lose in conducting the battle royal with this fatal scourge.

Patients who die of tuberculosis, *starve to death*. Those who recover from tuberculosis are *fed to health*—cured by feeding. Feeding, however, is not necessarily nourishing, no more than eating is assimilating. Thousands of victims of this wasting disease starve with stomachs full, and plenty more within reach. There is no dearth of elegant and costly viands—it is availability they lack. They call for an exhibition of vito-chemic force which the consumptive's stomach does not possess. Bovinine does nothing of the kind. It is living tissue pabulum in natural solution and instantly available. It responds at once to the demands of the starving organism.

Life nourishes life, cell rebuilds cell, and the life of all cells is the circulating, vivifying fluid, the sap in the tree, the blood in the animal. Plants transmute crude inorganic matter into organic forms; animals take up vegetable organism and advance them to a higher stage. Each advance is an intensification, a rise in the vital scale, a further refinement of cell structure and cell function.

Bovinine quickly and permanently restores the broken constitution of the consumptive by supplying the vitalized protoplasm, living cells, ready for instant appropriation, without taxing the digestive system. It builds up the demoralized system by furnishing the ready-prepared pabulum, and by resting them, restores the digestive and assimilative functions. The victims of consumption starve because the vital organs tire out and give up the struggle surrendering to the forces that disintegrate and destroy.

Bovinine bases its claims wholly on its direct and positive influence in restoring vital tone, flesh and strength to the debilitated system. It begins at the

oundation by restoring the blood. It upplies the shattered and wasted or- ganism with exactly what it must have n order to recuperate, and supplies it in form that is immediately available.

THE BOVININE CO.,
75 W. Houston St., New York City.

Celerina is a powerful stimulant vithout the depressing after-effects of lcohol, caffeine, nitro-glycerine, etc. It s also a reliable nerve tonic. A pleas- nt exhiliration is experienced after a ose of one or more teaspoonfuls, and nder its continued use a renewed ca- acity for mental and physical exertion esults. It is indicated in all forms of xhaustion, mental inertia and senile veakness.

The phosphates of iron, soda, lime nd potash, dissolved in an excess of hosphoric acid, is a valuable combina- ion to prescribe in nervous exhaustion, eneral debility, etc. Robinson's Phos- horic Elixir is an elegant solution of hese chemicals. See page 477.

Doctor: If you have any difficulty in elieving your old cases of nasal or haryngeal catarrh, a postal card mail- d to the makers of Iodo-Vapo will ring to you a sample bottle (full size. vith formula) of the most efficient gents yet discovered for the treatment f this disease. Just drop a card to Hargrave Chemical Co., Wilson, N. C., nd watch results. See ad. on another age.

Sanmetto in Difficult Cases of Cys- tis, Prostatitis, Incontinence, Impo- ncy and Hematuria.—I have used anmetto very extensively in my prac- ce for years, and as evidence of my

DOCTOR:

HAVE YOU USED LEU-KRE-TOL

THE NEW ANTISEPTIC

COMPOUND?

The Formula combines, under heavy trituration, the following drugs: Acinum Boracicum, Acidum Carbolicum, Menthol, Hydrastine Sulphas, Sodii Boras, Alumen, and Glycerinum. The powder will readily go into solution and is not only an Ethical, Scientific Pharmaceutical product, but also a pleasant, nor irritating and efficient preparation.

PHYSIOLOGICAL ACTION:

Antiseptic, Disinfectant, Deodorizer, Astringent and Antiphlogistic, reducing inflammatory exudates by its exosmotic action.

THERAPEUTICAL INDICATIONS:

Catarrhal conditions of nose and throat, tonsillitis, pharyngitis, hoarseness, etc. Usual ℞ being (Leu-Kretol ʒi Glycerine ʒiv Aquæ Q. S. ℥vi) either as Douche or Spray.

VAGINAL DOUCHE:

Especially valuable in Leucorrhoea, Vaginitis, Urethritis, Gonorrhœa, Pruritus, Septic conditions of Puerperal State, (being a superior remedy to Creolina, etc..) and in all offensive Uterine and Vaginal discharges. (ʒi to 1 Qt. of hot water.) Samples and literature on request.

Don't forget the name LEU-KRE-TOL.

Manufactured by the

LEU-KRE-TOL CHEMICAL CO.

Baltimore, Md.

Branch

Winston-Satem, N. C.

perfect satisfaction will say that I continue to prescribe it in all difficult cases. In cystitis, prostatitis, incontinence, impotency and many cases of hematuria I use Sanmetto with assurance of perfect success. In my female practice I find it the remedy par excellence, especially as a sexual tonic and a mammary rebuilder. I shall continue its use in typical cases. O. L. HUDSON, M. D.

Princeton, Ind.

A Useful Bacteriological Chart.—In these days when a gullible public prescribes for itself from the patent medicines on the frieze of the trolley-cars, or takes the profitable substitution that the druggist passes over the counter, it is no wonder that physicians feel a bit out of sympathy with the venders of drugs, and make unfavorable comparisons between the commercialism of the men who supply medicines and the science of the medical profession that prescribes them.

But we should never forget that were it not for the great manufacturers and importers of drugs we might still cull our own herbs, and use our own mortars and pestles. As an indication of the aid that such houses may be to physicians, we call attention to the colored plates of pathogenic organisms that have been prepared for the profession by the house of M. J. Breitenbach Co., the importers of Gude's pepto-Mangan.

No text-book and no one work on pathogenic bacteria contains such a number of excellent diagnostic illustrations, nor such beautiful examples of lithographic art, as these.

Many physicians are too far from libraries and laboratories to be able to put into practice the training of their college days. They need just such a set of reference plates to be able to make microscopical examinations. The recognition of this need and the care that has been taken to fill it shows a spirit of enterprise in this firm that we wish might serve as an example to others. For, if, instead of advertising to the public, the manufacturers of drugs would make such valuable contributions to science as lies in their power, there might be more sympathy between them and physicians.

The original sketches were in water colors by one of the leading bacteriologists in this country, and have been reproduced in the minutest details by the best skilled artists in lithography.

There are sixty separate examinations represented, requiring the services of four skilled artists to make the original drawings from sketches.

Time consumed, twelve weeks each; or labor for one man forty-eight weeks.

The labor of proving same required the time of three provers five weeks each, or the total time of one man fifteen weeks.

Eighty lithographic stones were used for the drawings and proving original designs.

The time for transferring and printing of all colors was sixty-one days.

The chart passed through the printing press sixteen times.

Colors used: Black, yellow, red, dark blue, purple, buff, light blue, medium blue, medium purple, light purple, light pink, medium pink, green, brown, gray.

The full set of sixty cuts has been prepared to send to any physician who writes for them, from the firm of M. J. Breitenbach Co., New York.

Puck's Philosophy—Praise from people that we despise generally convinces us that they have good points after all.

DOCTOR: Here is a Pointer for You, and This Is the POINT

ABBOTT'S SALINE LAXATIVE is the best eliminant and the basis of the best treatment for the uric acid diathesis and other auto-infections on earth.

It is particularly indicated in Summer Difficulties: To clear out, clean up, and keep clean means from sickness to health, and THIS WILL DO IT. Prove it for yourself.

KEEP IT ON HAND

ABBOTT'S
EFFERVESCENT
SALINE LAXATIVE
(Seidlitz Salt)
(Chemically pure magnesium sulphate in effervescent combination)
AN IDEAL REFRIGERANT, ANTI-FERMENT ANTI-ACID LAXATIVE OR CATHARTIC
According to dose and condition.
IT NEVER GRIPES
MANUFACTURED BY THE ABBOTT ALKALOIDAL CO.
Keep in a Cool Dry Place

IT DOES THE BUSINESS AND NEVER GRIPES

Abbott's Saline Laxative is over 80 per cent chemically pure Sulphate of Magnesium in effervescent combination, while its several imitators are ill-tasting, shabby affairs of less than one-fourth its strength. It is pleasant to take and fits all conditions where a prompt and efficient eliminant is required.

It is successfully prescribed by increasing thousands of doctors everywhere. Most jobbers and leading retailers are supplied. Specify on your prescriptions, or, if you dispense, order of jobber or direct from our laboratory for your office. Single package to physicians, by post, 35c. In lots of half dozen or more, per dozen, $4.00. Retail price, 50c. Direct orders we deliver prepaid when cash accompanies. See price list for discounts in gross quantities. Don't fail to try Abbott's Saline Laxative when you want results. It is pleasant to take, promptly efficient, does not nauseate and never gripes.

SALITHIA Our ready-to-use treatment for Rheumatism, Gout, and the thousand-and-one manifestations of the uric acid diathesis, is a soluble salt of lithium in granular effervescent combination with colchicine. A trial will demonstrate that this preparation is unexcelled. Same size and style as above. Retail price, 75c. One package to physicians, post-paid, 65c. In lots of half dozen up, $6.00 per dozen. Terms as above.

A COMPANION REMEDY to ABBOTT'S SALINE LAXATIVE, which should be used in all infective, fermentive conditions: dyspepsia, typhoid fever, Summer derangements, etc., is

THE W-A INTESTINAL ANTISEPTIC

a compound preparation of the C. P. Sulphocarbolates of lime, soda and zinc. It is efficient, non-irritating and first-class in every way. Price, tablets, 100, 35c.; 500, $1.40; 1000, $2.75. Postpaid for cash with order.

Samples and our complete price list of alkaloidal remedies—up-to-date supplies for the physician—will be sent on request to those who have not already been supplied, but more real satisfaction will result from the use of the corner coupon below.

We hope that every doctor really interested in good drugs, in advanced methods of medication, in protecting his practice will write us in answer to this ad.

For the attached coupon, which you should mail with your enclosure, we will send you three 25c. size cans of ABBOTT'S SALINE LAXATIVE, two 50c. size of ABBOTT'S SALITHIA, and 100 W-A INTESTINAL ANTISEPTIC TABLETS, also special literature on these products, and our complete price current of alkaloidal preparations.

WE ARE READY, SUPPOSE YOU DO IT NOW!
WRITE THE MOST CONVENIENT POINT.

CUT THIS OFF AND MAIL WITH YOUR ORDER

For the enclosed DOLLAR send me postpaid 2 cans 50c. size **Abbott's Salithia**; 3 cans 25c. size **Abbott's Saline Laxative**; 100 **W-A Intestinal Antiseptic Tablets.**

DR.....

TOWN.....

STATE.....

Carolina Med. Jour. Coupon

The Abbott Alkaloidal Co.

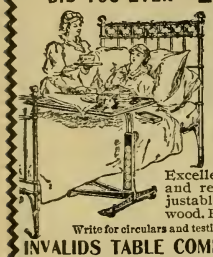
0 W. Broadway, New York. **Ravenswood Station, Chicago.** *13 Phelan Bldg. San Francisco.*

AGENTS WANTED

Who reside in North or South Carolina, to sell our goods to houses and stores. Money can be made. For terms and particulars address, with reference,

A. M. AKE,
119 Ninth St., Jersey City, N. J.

DID YOU EVER ENJOY A MEAL IN BED?



Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
300 Rose Bldg., CLEVELAND, O.

For Drunkenness and Drug Using.

Keeley Cure

Please write us. Correspondence confidential.

THE KEELEY INSTITUTE, Dept. B, Greensboro, N.C.

Our Illustrated Handbook Sent Free On Request

NEURILLA

SOOTHES, CALMS AND REGULATES THE NERVES.

INDISPENSABLE FOR NERVOUSNESS.

No bad effects follow its use.

DAD CHEMICAL CO., NEW YORK.

Robert Fletcher, editor-in-chief of the *Index Medicus,* makes the following announcement: "The *Index Medicus* was established in 1879, under the editorship of Drs. John S. Billings and Robert Fletcher, and was discontinued in 1899. The present publication, which is undertaken by the Carnegie Institution, will be known as *Index Medicus,* Second Series, Volume I, commencing in January, 1903. It consists of the titles in full of books, pamphlets, theses, contributions to co-operative works, and original articles in journals, transactions of medical and scientific societies, arranged under subject headings. It is issued as early as possible after the first day of the month, and it represents the literature of the preceding month. A table of contents accompanies each number, and on the completion of the volume an 'Annual Index of Authors and Subjects' is issued. The subject part of this annual index is elaborately subdivided, the classification closely resembling that of the Index Catalogue of the Library of the Surgeon-General's office. The titles in certain languages, as Russian, Polish, Swedish, Danish, Finnish, Hungarian, Bohemian, Roumanian, and Japanese, are translated into English. The *Index Medicus* publishes no advertisements, and does not exchange copies with other journals."

Medical Student: "They don't bleed people now-a-days as they did forty years ago, do they professor?"

Professor: "Not with the lancet."

The Second Day Out—Sailor (shouting:) "Man overboard!"

Newlywed (groaning): "Lucky Dog."—*Puck.*

WITHOUT RESPIRAZONE

(Tilden's)

ASTHMA remains the BETE NOIR of Physicians.

WITH RESPIRAZONE

(Tilden's)

ASTHMA has lost its terror.

It gives prompt relief in Asthma, Hay-fever and all spasmodic respiratory diseases.

NARKOGEN.

(Tilden's)

HYPNOTIC, ANODYNE, ANTI-SPASMODIC.

A Step in Direction of Definite Therapeutics.

Each fluid dram contains:

Hydrate Chloral.....grs. x
Potass Bromide..... ..... grs. x
Hyoscin Hydrobromate.....grs. $\frac{1}{200}$
Narkine (Tilden's).....grs. ss

"A new Valuation of all Values."

Prepared expressly for Physicians' Prescriptions.

THE TILDEN COMPANY,

Manufacturing Pharmacists.

New Lebanon, N. Y. St. Louis, Mo.

MEDICAL NEWS AND ITEMS.

Cholera still continues in Manila.

The plague in Chili is spreading.

Montana has a State Board of Osteopaths.

During the year 1902 Massachusetts had 2,263 cases of smallpox.

Because of the wetness of the season, there is an enormous increase of mosquitoes along the North Atlantic coast.

Bubonic plague is said to have appeared at La Paz, Guaymas, Mulje, and Mazatlan, all on the Pacific coast of Mexico.

By order of the government of Austria, every drug store in that empire must keep diphtheria antitoxin on hand and sell it at cost.

The King of Denmark has created Lord Lister, on the occasion of his jubilee, a Knight of the Grand Cross of the Order of Dannebrog.

Sweden's last census records the lowest death rate yet attained by a civilized nation. During the last ten years it has only averaged 16.49 per 1,000.

Guatemala, with a mortality of 41 in 1,000, is said to be the least healthful country in the world; while New Zealand has the lowest death rate, 11 in 1,000.

It is reported that Sir Frederick Treves, the leading surgeon of England, who performed the operation on the King for appendicitis, is about to retire from practice.

The most inexpensive prophylactic treatment is known as the treatment sold by the friars in the Philippines, consisting of a cross and a prayer. It is guaranteed to prevent cholera, and sells for 2½ cents in Mexican money, or a trifle over a cent gold.

The Lower House of Cuban Congress has offered $400,000 to aid the

city governments in the islands to continue the high sanitary standard achieved under American occupation.

The American Association for the Advancement of Science petitioned the President, January 2, that one member of the Isthmian Canal Commission should be a physician.

It is stated on good authority that Dr. Lorenz, the Viennese orthopedic surgeon, states that he finds the slightest indulgence in alcoholic beverages detrimental to his steadiness of hand.

The United States Civil Service Commission announces that the Commissioner of Pensions would like to provide for the appointment of twenty-five young students of medicine as clerks or copyists in the pension office. Only graduates of recognized medical schools will be allowed to take the examination.

It is reported by a contemporary that in two cases of heat-stroke in Cincinnati twelve ounces of blood was withdrawn, and replaced by an equal amount of physiological salt solution, with excellent results. Temperature was reduced, convulsions ceased, and the patients fell into refreshing sleep within an hour.

Dr. John F. Wilson, of Poughkeepsie, while examining a rifle five years ago, accidentally discharged a bullet which entered his head to the left of the nose. Dr. Wilson latterly felt a soreness of the throat, and with the aid of a mirror discovered the cause in the protruding bullet, which he at once removed with a forceps.—*Medical Age.*

The Chinese port of Amoy has the unenviable reputation of being the most unhealthy place in the world. Built some ten centuries ago over a cemetery in which, according to a modest calculation, 5,000,000 bodies were interred, its drinking water is derived from wells. Plague and typhus are epidemic, and the mortality reaches frightful proportions.

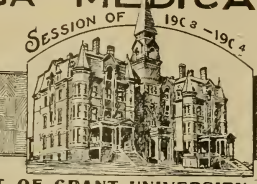
A hearing on dentistry was given at Washington on December 13 by the House Committee on Naval Affairs, and many leading dentists were present to urge that a bill be passed raising the grade of naval dentists. At present they are rated as yeomen, but the National Dental Association wants a "dental corps" created, so that the dentists may have proper rank and pay.—*Medical Review.*

By the will of Spencer Morris, formerly professor of medical jurisprudence and toxicology, the sum of $12,500 is bequeathed to the Medico-Chirurgical College of Philadelphia, the income from which is to be awarded annually to the member of the graduating class who receives the highest general average at the final examinations for the degress of doctor of medicine.—*Philadelphia Medical Record.*

The editorship of the *Medical Mirror,* made vacant by the untimely death of its founder, Dr. I. N. Love, has fallen to Dr. Raley Husted Bell, the poet-physician of the South. For some time Dr. Bell made *Moody's Medical Magazine,* of Atlanta, one of the most interesting of medical publications, and there is no doubt he will render the *Mirror* equally valuable, as the literary character of the two journals has been much the same.

The *San Francisco Call* states that Dr. A. H. Glennon, the accredited representative of the United States Government, is preparing a report to Surgeon-General Wyman, of the Marine Hospital Service at Washington, to the effect that there has never been bubonic plague in California. Dr. Glennon will go further, and declare positively that

CHATTANOOGA MEDICAL COLLEGE



MEDICAL DEPARTMENT OF GRANT UNIVERSITY. Fifteenth Annual Session begins in October and continues until April. New buildings. Beautiful climate. Large patronage. Every facility. A full teaching corps. Laboratories with latest equipment. Modern methods of instruction. Excellent hospital Minimum living expenses. City one of the most beautiful in America, both by nature and art. National Military Park. National Cemetery, and miles of splendid Government Boulevards. Scenic surroundings unexcelled on this continent. Requirements those of Southern Medical College Association.

E. A. COBLEIGH, M. D., Dean, Chattanooga, Tennessee.

University of Maryland

SCHOOL OF MEDICINE.

The Ninety-Seventh Regular Session will begin October 1st, 1903, and continue until May 15th, 1904. Four Years Graded Course. New Laboratory building. Excellent Laboratory Equipment. Clinical Advantages Unsurpassed. For catalogue and other information, address

R. DORSEY COALE, Ph. D., Dean,

University of Maryland, *Baltimore, Maryland.*

University of Virginia,

Medical Department.

CHARLOTTESVILLE, VA.

The course of instruction in this Department extends over four full sessions of nine months each, and embraces a full series of didactic lectures with ample practical work in Anatomy and Operative Surgery in the Biological and Pathological Laboratories.

A Modern Teaching Hospital.

Session begins 15th September.

For catalogue, address . . . . . **J. M. PAGE, Chairman.**

COLLEGE OF PHYSICIANS AND SURGEONS OF BALTIMORE, MD.

Thirty-Second Annual Session will begin October 1st, 1903. New building, modern equipment, unsurpassed laboratories, large and independent Lying-in Asylum for practical obstetrics, and many hospitals for clinical work, present to the medical student every advantage. For catalogue and other information, apply to

THOMAS OPIE, M. D., Dean, Cor. Calvert and Saratoga Sts., Baltimore, Md.

When writing advertisers please mention this Journal.

after a thorough and extensive investigation, the bacillus supposed to be that of the plague is that of chicken cholera.

An army doctor has noticed that when a wounded soldier was taken within easy hearing of music, hemorrhage was either greatly reduced or actually stopped. Neither he nor others who confirmed his observations could understand how this phenomenon was brought about, but it is now believed that the vibrations of the air produced by the music cause the patient to become faint, in which case the action of the heart is so considerably lessened that the overflow of blood is reduced.—*Exchange.*

The sickness reported at the naval stations due to the overcrowding of the enlisted force on account of insufficient accommodations of the receiving ships, was predicted by Surgeon-General Rixey several months ago. While Congress was in session he recommended to the Secretary of the Navy that the receiving ship system be abolished, and that land barracks be erected at various naval stations for the preliminary training of recruits, and he expressed the opinion that epidemics were brought by the crowding and other conditions existing on board the receiving ships. Congress, however, failed to make the appropriation asked for, but better things are expected from the new Congress.

In order to evade the strict regulations of the Marine Hospital Service, the Gulf Transit Company, which is an auxiliary to the Louisville and Nashville, has equipped its three steamers of the Tampico coal line with complete fumigating plants, and the vessels on their return from Tampico are no longer detained at the quarantine station. The company has arranged with the surgeons of the service at Tmpico t fumigate the vessels in the stream there before their departure, and as i usually requires about five days i which to make the passage, the steamer are allowed pratique. This method re sults in a saving of about $2,000 fo every vessel on each trip.—*America Medicine.*

A Berlin physician of renown, be lieving that excessive practice at th piano is responsible in a measure fo the alarming spread of nervous dis eases, has instituted a campaign agains beginning the musical education c children at the early age now custom ary both in this country and in Europe In his opinion no girl should be per mitted to enter upon the study of musi before the age of 16, and even then th hours of drumming upon the keyboar should be restricted to two a day. O 1,000 girls who undertook piano prac tice before the age of twelve, 600 late became afflicted with some form of ner vous disease, but of 1,000 whose mus cal education was neglected only 10 over suffered in this manner.—*Amer can Medicine.*

From Manila, according to *America Medicine*, comes the following: As sistant Surgeon Heiser says the numbe of cases of plague has been steadily in creasing of late. With the view to pre venting its spread to other parts of th islands and to the United States, it ha been deemed necessary to fumigat with sulphur, in order to kill rats an vermin, the entire shipping which en ters and leaves this port. This is very large undertaking, and taxes th station force to its utmost limit. Th Board of Health is co-operating on lan in this matter. They have employed number of rat-catchers, and pay a five cent bonus for every rat delivered t

hem. In addition they contemplate in-culating every Chinese with Shiga's ntiseptic serum.—*Med. Age.*

A major and surgeon of the army tationed in the Philippines writes that ecently, when the chief nurse of a mall base hospital in Southern Luzon vas sent away, there was a great strug-le among the five nurses remaining for he vacant position, which meant a dis-inct increase in pay. Each one of the ive came to the office of the surgeon in harge to show cause why she should be ppointed chief nurse, and why none of he others were entitled to that distinc-ion. The young Solomon in charge vas "up against it," but gave the fol-owing decision: "Each one of you must vrite on a piece of paper her exact age, nd send it sealed to me. The oldest voman will be made chief nurse." There s still a vacancy as chief nurse in a mall base hospital in Southern Luzon. —*Medical Age.*

Captain J. C. Gilmore, U. S. A., at Savannah, Ga., says that the United States army is threatened with many ases of leprosy as a result of service in he Philippines and Cuba. He wrote ecently to the War Department for in-ormation as to how he was to pay his irst sergeant, who is suffering from eprosy at Tybee, Ga. At present, how-ver, this case of Sergeant Mix is the nly case in the army, and he is kept olated, so that there is no danger of he contagion spreading. The acting urgeon general does not believe that eprosy is as contagious as smallpox. The War Department has refused to re-ove this private soldier, now confined t the military station at Tybee, to the apelo quarantine station. No fear is ntertained that leprosy will spread mong the United States soldiers.—*Philadelphia Medical Journal.*

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:

8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET

CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

According to the police of Philadelphia, it is not an unusual thing for boys to become intoxicated by inhaling the fumes from kerosene. The vicinity where these debauches have been observed is usually in the neighborhood of the railroad yards where the empty oil cars are stationed. The method of obtaining the fumes is for the boys to climb upon the tank car, place their noses over the manhole, and thus inhale the fumes. The effects produced are similar to those caused by alcohol: first a feeling of exhilaration, then a period of stupor, and following is the period of deep sleep. It is stated that in several instances boys drunk from these fumes have been taken to hospitals in the vicinity. From the meager amount of observation in such cases it is believed that the effects on the system are similar to those produced by alcohol.—*Medical Age.*

It is reported in one of the London papers that Mr. W. K. Vanderbilt has offered to his bride the money to carry out her long unfulfilled desire to build a hospital for free treatment of the poor. The building will be the most complete that can be devised and thoroughly modern in construction. Mrs. Vanderbilt will have *carte blanche* in everything relating to the situation and management of the hospital, which will be called by her name.—*Medical Record.*

According to statistics recently published by the imperial health office in Berlin, the death rate per million of population in the various countries is as follows: Russia has more than 4,000 deaths; Austria-Hungary and France more than 3,000; Sweden, Germany, Switzerland, and Ireland more than 2,000; Netherlands, Italy, Belgium, Norway, Scotland and England more than 1,000.

When Morconigrams Fill the Air—Thousands of people now mourn the lost opportunity of Bell Telephone investments. Scarce a man lives who does not know some one that was made rich by a small investment in telephone stock. Now a new opportunity is offered to those who are forehanded enough to grasp it in the Marconi Wireless Telegraph securities. When Morconigrams fill the air, flying back and forth over ocean, between continents, and over mountain, river and plain, between oceans, it will be too late, and another opportunity will have passed. The financial representations of the Marconi Wireless Telegraph Co., of America, Messrs. Munroe & Munroe, of 44-60 Exchange Place, New York City, state that the demand for the $5.00 certifiscates of the company's stock, which they are selling amount at their disposal will soon be exhausted. When these are gone the price will necessarily be advanced, and those who want to buy will be compelled to pay a higher price for them.

The Life Duration of the Typhoid Bacillus.—K. Levy (*British Medical Journal,* May 30, 1903) describes some experiments on the vitality of the typhoid bacillus derived from the stool. The feces of a typhoid patient were deposited undisinfected in a cemented pan, remained in this for four winter months, and were then placed in a clay soil for fifteen days at winter temperature. From this soil, in amounts proportionately small, typical typhoid bacilli were cultivated on plates kept at low temperature. The bacillus appears thus to retain vitality under ordinary circumstances for a long period. Such results point to the absolute necessity of disinfecting typhoid stools and urine before disposing of them.

THE PRESBYTERIAN HOSPITAL

Will Receive all Classes

Of Medical and Surgical Cases,

(EXCEPT CONTAGIOUS.)

A Full Corps of PHYSICIANS

and SURGEONS in Attendance.

Address,

PRESBYTERIAN HOSPITAL,

Charlotte, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain CACTINA, the active proximate principle of CEREUS GRANDIFLORA.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for INDIGESTION

A palatable preparation of PANAX SCHINSENG in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

JOHN R. IRWIN, M. D.,

CHARLOTTE, N. C.

Special Attention Given Surgery and Gynecology.

When writing advertisers please mention this Journal.

PSORIASIS
SCABIES
TINEA
HERPES
PHTHIRIASIS
ECTHYMA
ACNE
AND OTHER
SKIN DISEASES

The following prices include postage or expressage :

1	2-oz.	bottle Chaparrin	$1 00
1	4-oz.	" "	1.75
6	2-oz.	" "	4.75

ECZEMA

Successfully Treated with the New Dermatological Remedy

CHAPARRIN

Representing the active principles of the Texas Shrub Chaparro Amargosa in combination with Phenol, Salicylic Acid and Camphor. Remarkable success has been reported in the use of CHAPARRIN, the results in indicated cases being exceedingly gratifying. Speedy and permanent relief follows in much less time than under former methods of treatment.

Applied with sufficient strength CHAPARRIN always allays itching.

Physicians are requested to have their druggist place order for half dozen CHAPARRIN so that prescriptions can be more conveniently filled. Address

THE MATTHEWSON LABORATORY,

MARSHALL, TEXAS.

Drake's Suicidal Meal.—It is alleged that Mrs. Robert Drake, of Covington, caused the death of her husband by the administration of sulphate of zinc and antimony. The case has attracted considerable attention. The defense furnished evidence to show that the dead man's last meal consisted of three slices of fresh pork, each five inches wide, seven inches long and a quarter of an inch thick. Over this he poured a quarter of a cup of vinegar from pickled onions. He also ate seven pickled onions, about the size of a small walnut. He also ate a large slice of bread, two slices of warm bread, each slice ten inches long, five inches wide and half an inch thick, covered with butter. Drake also drank almost two cups of coffee and a quart of ginger tea. The defense will undertake to show that he was then seized with cholera morbus.

One witness testified that he had seen Drake eat twelve chicken legs, drink seven to eight cups of coffee at a sitting. "He had a wonderful appetite," said the witness. He had seen him drink patent medicine from the bottle, taking almost the entire contents at a dose.

By the memories of Jules Verne, and the shades of Baron Munchausen, what a gormandizer! What a capacity! Strange that the two emetics did not defeat the death angel.—*Med. and Surg. Monitor.*

The *British Medical Journal* of July 4th, says: "Though there is probably no country in Europe where more elaborate laws exist for the control of quackery than Germany, it is a significant commentary upon the manner in which they are enforced that quacks abound and thrive." Public sentiment in that country has at last been aroused and attempts are being made to find means of suppressing this kind of fraud.

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these Preparations.

A

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

R Each fluidounce contains:

Hypophosphites Soda	2 gr.
" Lime	1½ gr.
" Iron	1½ gr.
" Quinine	¾ gr.
" Manganese ..	1½ gr.
" Strychnine ..	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate Sodium	12 grains
" Potassium	4 "
" Calcium	4 "
" Iron	2 "
FREE Monohydrated Phosphoric Acid	16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE.—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

C

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence o a sedentery life, coupled with nervous and mental stal strain.

Reliable Pepsin is one of the best Digestive agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating. Children, one-half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromaticmenstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable.

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50.
N. B.—We also make **25 per cent.** strength.
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

Saloform, in Powder, per ounce	$1 25
Saloform, 5-grain Tablets, per 100	1 25
Saloform Elixir, pints	2 00
Solution Albuminate of Iron, Syrup Albuminate of Iron Comp., pints	1 00
Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

Please specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

Founded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

When writing advertisers please mention this Journal.

CATARACTS!

USE Succuss Cineraria Maritima. (BARNES'.)

Successfully used for removal of CAPSULAR and LENTICULAR CATARACTS, CORNEAL OPACITIES.

Does not cause Inflammation.

Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy:

"Mrs C—, aged 73. The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis: gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Succuss Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

Dr. Osmon Royal, under date of June 4th 1903, writes:

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Succuss Cineraria (Barnes)."

Dr. E. V. Cobb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Succuss Cineraria Maritima (Barnes).

MADE FROM THE FRESH GREEN PLANT ONLY.

$1.00 per vial 2 drachm. $3.00 per oz. by mail, post paid

Send for literature. Made exclusively by

THE BOTANIC DRUG COMPANY,

BRIDGEPORT, ALA., U. S. A.

A Sure Funeral.—A visitor to Richmond, U. S. A., overheard the following conversation between his hostess and the cook:

"Please, Msi' Gawdon, may I git off nex' Sunday to go to the fun'ral of a friend of mine?"

"Next Sunday? Why, Eliza, this is only Monday! They wouldn't put a funeral off for a week."

"Yas'c"—respectfully—"but dey has to, 'cause he an't dead yit."

"Not dead! I am positively ashamed of you! How can you be so heartless as to arrange to attend the funeral of a man who is still living! Why, he may not die at all."

"Ys'm, but he will; dey ain't no hope."

"It is impossible to say that, Eliza. The best doctors are often mistaken. But, even if they do know a case to be hopeless, they cannot predict the exact time of a man's death with such a certainty that the funeral can be arranged so long beforehand."

"Yas'm"—with calm assurance—"but he will be buried nex' Sunday for all dat, 'cause he's gwin' to be hung on Friday!"

Not Self-Supporting.—The little boy was doing his home lessons, and was asked if he knew who Atlas was.

"A giant who was supposed to support the world," answered the child.

"Oh, he supported the world, did he?"

"Yes, sir."

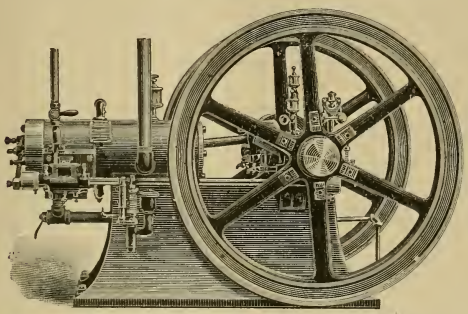
"Well, who supported Atlas?"

The little fellow was nonplused for a moment, but after some thought said:

"I expect he must have married a rich wife."—*Tit-Bits.*

GAS AND GASOLENE ENGINES

Available for all Power Purposes, and built in sizes from one to 100 H. P.



THE FAIRBANKS COMPANY.

"FAIRBANKS" STANDARD SCALES.

19 and 21 Light Street, - - - - - BALTIMORE, MD.

Write for catalogue and particulars.

Proverbs Up to Date.—Better swallow your good jest than lose your good friend.

Sweet are the uses of adversity, bitter are the uses of prosperity.

The rising generation owes much to the inventor of the alarm clock.

If vanity were a deadly disease, every undertaker would buy fast horses.

When the last trump sounds, some woman will ask Gabriel to wait a minute.

A good field of corn is one thing a farmer doesn't care to have crowed over.

The Dead March is not necessarily the one that the musicians have murdered.

The oil of insincerity is more to be dreaded than the vinegar of vituperation.

A walk may improve your appetite, but a tramp will eat you out of house and home.

The man who cannot be beaten is he who holds his head up when he has been beaten.—*Everybody's Magazine.*

Her Objections.—"My dear," whispered the husband who had accompanied his better half to the shop where she expected to purchase a spring gown, "I think that dress with the black lace fixings on it is nobby. Why don't you get it?"

"Oh, it would never do," answered the wife. "Everybody is wearing that style."

"Then, here's another good looking one—this one with the separate jacket and the strap fixings on the skirt."

"Mercy, no! Why nobody is wearing that!"—*Life.*

Jefferson Medical College

OF PHILADELPHIA.

New College Building and New Laboratories.

The Seventy-Ninth Annual Session will begin September 24th, 1903, and continu eight months. For four annual sessions the curriculum provides without extra fee: 1 Practical manual training in ten different laboratories recently fitted up at heavy cost 2. Recitations by the faculty and others. 3 Didactic lectures and demonstrations in th commodious new buildings. 4. Clinics and bedside ward work in small groups at the Col lege Hospital, beside the clinics given by the staff of the College at the Pennsylvania Philadelphia, German, St. Joseph's and Municipal Hospitals. 5. Lying-in cases at th College Maternity.

A New Fire-Proof Hospital, with unrivalled facilities for clinical teaching, is nov building at a cost of $700,000.

For circular and information, address **J. W. HOLLAND, Dean.**

University College of Medicine,

RICHMOND, VIRGINIA.

MEDICINE — DENTISTRY — PHARMACY.

Unity — — — — *therefore,* strong courses.
Concentration — *thereby,* strong teaching.
Method — — — *therefrom,* strong students.

CATALOGUE — 100 PAGES — ON APPLICATION.

The Philadelphia *North American* of July 15th, reports that between the 4th of July and that date, thirty-seven deaths from tetanus following injuries by toy pistols had been reported. Seven of these were in Philadelphia. The district attorney of that city has determined to bring action against the shopkeepers who sold these weapons as soon as the facts are established by the coroner. Fortunately, there is a law in the State of Pennsylvania that forbids the sale of explosives to minors. If a few convictions can be obtained under this law the effect would undoubtedly be widespread and more care would be exercised in the sale of dangerous explosives to children.

It is reported that an investigator in our marine service, Dr. Charles Wardell Stiles, has discovered an intestinal parasite in the mosquito that renders the female sterile, and he is also reported to be engaged in an attempt to propagate it artificially. It is to be hoped that he will be successful and that w may soon have hatcheries under gov ernment and State auspices for the mos quito parasite, just as we have now fo fish. This parasite is called *agamomer mis culicis.* It is surprising that loca authorities in places infested by th mosquito do not adopt the measures o destruction now advocated.

Managing to Live Through It.— "Still doubled up with that inferna rheumatism, are you, Notley? Upo my soul, I am sorry for you,' said th friend who had dropped in for a shor call.

"I am glad to have your sympathy, replied the sufferer, wincing a little as sharp twinge caught him in the elbo joint, "but I have read the obituaries c thirty-two people who were sorry fc me."—*Chicago Tribune.*

Better is the surgeon who saves finger than he who amputates a leg.

"THE KEY TO HEALTH."

Jackson Springs, Moore, N. C.

A health and pleasure resort conveniently located in the Long Leaf Pine section in orth Carolina, where malaria and mosquitoes are unknown. The nights are cool, the pure and balmy. Hotel accommodations unsurpassed; hot and cold baths. Those eking amusements will find up-to-date Golf Links, Tennis Court, Croquet Grounds, n-Pin Alley, etc. Transportation facilities first-class; telegraph and express offices nveniently located.

Jackson Springs Water has long been used with excellent results in many chronic seases, and is considered by all who have used it as a specific in dyspepsia and indigestion.

It increases the appetite, and enables the patient to digest all food taken without ouble or inconvenience in any way, thereby increasing the strength of the patient and oducing that condition of health so much desired. Catarrh of the liver, stomach or wels, where the organic changes have not been too extensive, is always benefited and any times, most miraculously cured by the use of this water. In all cases of Cystitis, not e to stone, Jackson Springs water relieves immediately, if taken properly, and will in ort time make a complete cure. Nervousness, when not due to some organic condition, relieved at once by the use of this water, and especially is this the case when the rvousness is caused by over-work, indigestion and malassimulation. This water exercises indisputable therapeuticial influence in chronic Bright's disease, patient at once gaining strength with the power to take and digest food, and at the same time an analysis ows that the condition of the kidneys are improving.

In Renal Calculi, Gout, Rheumatism, Uric Acid, Dethearis, Anæmia, Sleeplessness, or ain fag, Jackson Springs water may safely trusted to relieve in a short time if taken operly.

Hypernemia of the Liver, with its furred tongue, nausia, bilious, diarrhœa, sallow mplexion, headache, irritability, general feeling of depression, and malaise are very ccessfully treated by a course of Jackson Springs water.

This water possesses to a remarkable degree the power of effectively cleansing the wels, stimulating the liver and expelling poisonous matter which may have accumulated the system, and thus giving the patient a new lease on life and making him feel like new man.

Children do well here, especially those who have recently suffered from bowel and omach troubles. Jackson Springs is an ideal resort for those patients convalesing from cent sickness. The water is delightfully cool and refreshing, and can be taken in large antities.

Analysis: Jackson Springs Water.

North Carolina Agricultural Department, Experiment Station.

NALYSIS No. 6,147. RALEIGH, N. C., Jan. 3, 1890.

SIR:—The sample of mineral water sent to the Station for analysis, in a demijohn arke dP. M. Wilson, contains on evaporation, per U. S. Gallon—

SOLIDS.		
Sulphate of Potash	.577	grains
Sulphate of Soda	.263	"
Chloride of Soda	.825	"
Carbonate of Soda	.578	"
Carbonate of Lime	1.721	"
Carbonate of Magnesia	.833	"
Oxide of Iron and Aluminum	.181	"
Sodium Phosphate	Trace	
Silica	2.567	"
Total	7.546	"

Your obedient servant,

H. B. BATTLE, [Seal.]
Director

Dr. A. C. Bethune, resident physician, is located in hotel and will be pleased to send stimonials and give any other information desired.

For space and rates address

. L. BAXTER, Manager Jackson Springs Hotel,

Jackson Springs, N. C.

When writing advertisers please mention this Journal.

The Hopkins Compressed Air Heaters

Electric Gas Alcohol

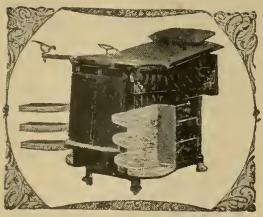
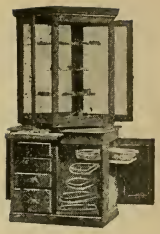
The Perfect Instrument for treatment of the ear with superheated air. Practically indestructible. Patented in all features. All kinds of special electric heaters for medical work. Write for booklet.

THE TERRY HEATER CO.,
Cleveland, Ohio.

What promised to be a useful and honorable career was suddenly cut short by the assassination at Puerto Cortez, Honduras, of Dr. Albert Ferrari, a recent graduate of the Medico-Chirurgical College, of Philadelphia. Dr. Merrari was a native of Honduras, had received his medical education here and had especially prepared himself under Prof. L. Webster Fox for the treatment of diseases of the eye, so common in the land of his birth. Arrived at home he visited his cousin, chief of police of Puerto Cortez. That official had become involved in a quarrel with an officer of the army and had challenged him to a duel. Instead of personally appearing at the place of meeting, the officer sent a file of soldiers, whose fire, by a freak of Hondura marksmanship, killed Dr. Ferrari, wh was present in his professional capacity The victim's friends and associates i this city are filled with regret and grie at the lamentable termination if a lif which had just crossed the threshold o professional existence.

He Had Warned Her.—Mrs. Kidd "Really, John! I wish you'd punish thi boy. He kept making the queeres noises all through the service this morn ing."

Irrepressible Child: "Boo, hoo 'Twasn't my fault. I told you I was fire engine before we started."—*Brook lyn Life.*

A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your ients. Therefore, in the selection of your equipment you should exercise great care. e testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

the best and are adapted to all lines of regular and special practice. They are superior workmanship and design, and include more conveniences than any other line on the rket. (Catalogue " A " fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

Sanatorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

autifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

PLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &C.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

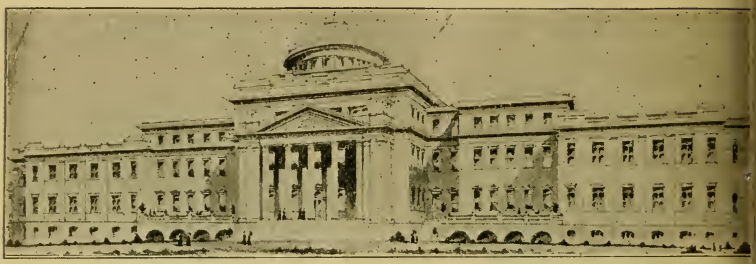
R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

When writing advertisers please mention this Journal.

Presbyterian College for Women....

Charlotte, N. C.



Magnificent New Buildings. Every Essential of Health and Comfort. Good Fare Experienced Teachers, Standard Advanced. Music and Art our Specialties. Charges lower than any other School of same grade in the South.

REV. J. R. BRIDGES, D. D., President.

IODO-VAPO

TRADE
(IODO-VAPO)
MARK

A recent discovery combining Iodoform and other valuable antiseptics—in oil—in such a manner that the offensive odor of the Iodoform is entirely eliminated. IODO-VAPO has proven its usefulness in the treatment of all catarrhal nose and throat troubles, and inflammatory diseases of the pharyngeal, laryngeal, bronchial and pulmonary regions. Administered in the form of vapor, it reaches every part of the air passages in the simple act of respiration, leaving its soothing, healing, antiseptic agents in its wake. A sample bottle, with the formula, gladly sent FREE to any licensed physician in the United States upon request.

Simply drop a postal and watch the result.

HARGRAVE CHEMICAL CO.,

WILSON, N. C.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions

WE HELP THE PHYSICIAN
AND HE HELPS US.

Every physician knows there are times when the usual methods of treating certain diseases fail to produce satisfactory results, and then they are at a loss to know what to do.

We take great pleasure in calling your attention to

Echols' Piedmont Concentrated Iron and Alum Water,

Which is being used with such success by physicians throughout the country in the treatment of Chronic Diseases, such as Indigestion, Rheumatism, Catarrh, Female Complaints, Kidney and Bladder Disorders, Nervousness, Torpid Liver, Stomach and Bowel Troubles, Scrofula and other Blood Diseases.

Our Concentrated Water is absolutely NOT a patent medicine, but is the product of the natural water as it comes from the Springs, reduced 160 times by a process which retains all of its medicinal properties. The 20 different minerals of which it is composed are nearly identical with those found in a healthy human system, and when such a treatment is used it is reasonable to expect good results.

Over 200 Virginia physicians alone prescribe our Nature's Remedy, besides using it in their own families.

We will send an 18-oz. bottle of Concentrated Water (equal to 25 gallons of the Natural Water), free of cost to any physician wishing to test it.

For sale by druggists. 8-oz. bottles 50 cents. 18-oz. bottles $1.00.

J. M. ECHOLS COMPANY, - - LYNCHBURG, VIRGINIA.

When writing advertisers please mention this Journal.

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED IN 1881—OPENED IN 1882.

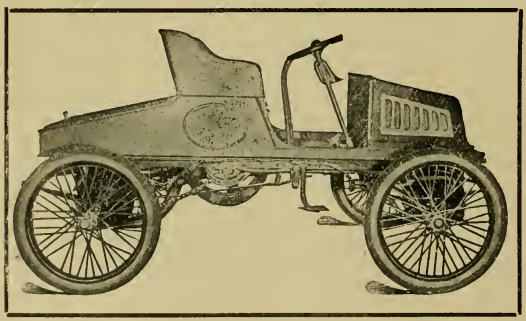
The New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant, and the hospital wards adjoin the lecture rooms. Since the fire in 1896, a new building has been erected and thoroughly equipped, and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James P Tuttle, M. D.; John A. Wyeth, M. D.
MEDICINE—Isaac Adler, M. D.; Morris Manges, M. D.; W. H. Katzenbach, M. D.; J. D. Nisbet, M. D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt. H. Wylie, M. D.; Brooks H. Wells, M. D.; W. Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—August Seibert, M. D.
DERMATOLOGY—Edward B. Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O. Born, M. D.; W. E. Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M. D.; Robert C. Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederich Whiting, M. D.
EUROLOGY—B. Sachs, M. D.
OBSTETRICE—Edward A. Ayers, M. D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York.

THE "ZENTMOBILE"



Where quality is desired, where comfort, durability and genuine pleasure is demanded in an automobile, this machine should be investigated before ordering.

We are all after results in an automobile, as well as everything else, and the best results are only obtained by years of persistent experimenting. We have passed through this stage. Don't buy an experiment. Get something that will require the least attention. It is a "ZENTMOBILE." - - - Get price and full particulars.

SINGLE CENTRE BUGGY COMPANY, Evansville, Indiana.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

Keep Posted on the

PHARMACEUTICAL BAYER PRODUCTS

ARISTOCHIN

Quinine Divested of its Disadvantages.

CITARIN

The Anti-Lithemic.

HEDONAL

The Promoter of Natural Sleep.

THEOCIN and AGURIN

The Most Powerful Diuretics.

PROTARGOL

The Best Substitute for Silver Nitrate.

HELMITOL

The Urinary Antiseptic, Analgesic.

SAMPLES AND LITERATURE SUPPLIED BY

FARBENFABRIKEN of ELBERFELD CO.

P. O. BOX 2160. NEW YORK. 40 STONE ST.

The SIMPLICITY

with which it is prepared for an infant's feeding is an exceptionally commendable feature in the use of Mellin's Food, and a mother or a nurse can readily comply with the doctor's directions without error or confusion.

Simply dissolve MELLIN'S FOOD in hot water and add FRESH MILK.

A few trials with a little careful observation will readily determine what changes, if any, in the fats, proteids or carbohydrates are needed, and the formula can then be varied to suit the requirements of the particular case. Will you allow us, doctor, to send you our pocket booklet of formulas? The analysis is given with each formula, and the booklet will prove a convenience to you.

MELLIN'S FOOD COMPANY, BOSTON, MASS.

S The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

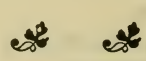
While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our

. . . regular eleven-ounce hexagonal bottle, . . .

you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.



M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

TRUE ANIMAL IRON

Physicians everywhere are looking for a **Blood** reconstructant that contains every element of nutrition of the animal, mineral and vegetable kingdoms, viz.: **Animal Iron;** a reconstructant that will supply every deficiency in the blood of anaemic patients in adequate quantity and quality: one that will nourish—stimulate—assimilate—without tax on the digestive organs. These requirements are all found in perfection in

BOVININE

It Contains 10% Animal Iron,

20 % Coagulable Albumen, and all the constituents of healthy **Blood.**

It is thoroughly sterile, requires little or no digestion, and produces blood corpuscles that **Mature.** Corpuscles of fullness and integrity. Herein lies its great superiority over any and all the preparations of inorganic iron. Your microscope will prove the truth of these facts. Our scientific treatise on Haematherapy for the asking. It contains reports of hundreds of cases.

THE BOVININE COMPANY

75 West Houston St., New York

PEACOCK'S BROMIDES

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.
DOSE:
One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day.

OD CHEM. CO., NEW YORK.

A Bath for Beauty and Health.

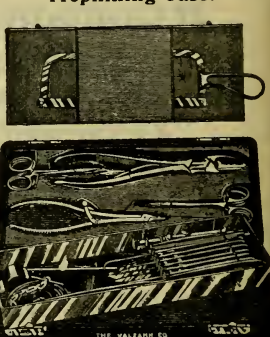
Allen's Fountain Brush and Bath Outfit

Friction, Shower and Massage Combined. The only Sanitary Bath Brush that at one operation thoroughly cleanses the skin, imparting a healthy tone and glow, and puts one in a condition to resist colds, la-grippe and all contagious and infectious diseases. Furnished either for bath tub connection, or with our fountain and Safety Portable Floor Mat. Enabling one to take a perfect spray and frictional bath in any room. With this outfit one is independent of the bath room, as a better bath can be taken with two quarts of water, than with a tub-full the old way. Insures a clear complexion, bright eyes, rosy cheeks, cheerful spirits, sound sleep. Should be in every home, and every travelers trunk or grip. Full outfit No. 2, consisting of Fountain Brush; combination rubber hot water bag; bath fountain and syringe and safety mat. Price $5.50.

Agents are making from $25 to $75 per week selling these outfits. Send for FREE booklet, "The Science of the Bath," prices and terms.

THE ALLEN MANUFACTURING CO., 429 Erie St., Toledo, O.

Valzahn Co.'s Amputating and Trephining Case.



Contents—1 Amputating Knife, 1 Scalpel, 1 Finger Knife, 1 Tenatome, 1 Curved Sharp Bistury, 1 Curved Blunt Bistury, 1 Tenaculum, 1 Grooved Director, 1 Pair Probes, 1 Trephine, 1 Tourniquet, 1 Dressing Forcep, 1 Amputating Saw, 1 Bone Forcep, 1 Needle Holder, 1 Straight Scissor, 1 Curved Scissor, 2 Pean's Haemostatic Forceps, 2 Tait's Haemostatic Forceps, 6 Needles, 1 Card Silk, 1 Coil Silver Wire, 1 Coil Catgut. All in fine Leather Case, $17.00. Knives are in Aluminum Rack removable to facilitate sterilization. **The Valzahn Company,** Manufacturers and Importers of Surgical Implements and Hospital Supplies, 132 South 11th Street, Philadelphia, Pa.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

ANTIPHLOGISTINE

Embraces by far the largest and most important field of curative therapeutics of any preparation known to the medical profession. This is a strong statement, true, but Antiphlogistine

HAS

Demonstrated to the best clinicians the world over, its decided value in relieving inflammation of the superficial and deep structures.

A

Medication which assures results to the practitioner, economizing the patient's energy and finance, cannot fail to hold its permanent and praiseworthy reputation.

In every instance it is of the utmost importance that Antiphlogistine be applied warm and thick and covered with absorbent cotton and a compress.

Synovitis, Bruises and Sprains readily recover under the protecting and aiding influence of Antiphlogistine. In deep-seated inflammations of the thoracic and abdominal viscera, Antiphlogistine has the

REPUTATION

Of rendering effective relief, very often aborting a serious termination by immediate resolution.

For convenience Antiphlogistine is marketed in four sizes only—Small, Medium, Large and Hospital—never in bulk. To insure economy and the best results always order a full package and specify the size required.

The Denver Chemical Mfg. Co.

DENVER LONDON NEW YORK

A High Tone

SHARP & DOHME'S

GLYCEROPHOSPHATES COMP.

GIVES A HIGH TONE TO THE NERVOUS SYSTEM IN

NEURASTHENIA PRESENILITY
CONVALESCENCE

IT BUILDS
TISSUES

A PINT BOTTLE FREE IF YOU PAY THE EXPRESSAGE.

SHARP & DOHME

BALTIMORE
CHICAGO – NEW ORLEANS – ST. LOUIS
NEW YORK

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

The Passing Clouds

A Small Volume of Facts and Romance by DR. D. S. MORRILL.

¶ Issued by the Franklyn Publishing Co., of Atlanta, Ga., and mailed by them on receipt of price, $1 00.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.
Dr. W. F. Goldsmith, General Surgery.
Dr. C. C. Stockard, General Medicine and Drug Habits.
Dr. S. G. C. Pinckney, Nervous Diseases.
Dr. J. M. Crawford, Eye, Ear, Nose and Throat.
Dr. Michael Hoke, Orthopoedic Surgery.
Dr. E. C. Davis, General Surgery.
Dr. W. Munroe Smith, General Surgery.
Dr. M. A. Purse, Children's Diseases.
Dr. W. L. Champion, Genito-Urinary Diseases.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

17 W. Cain Street, Atlanta, Ga.

Table of Contents.

PAGE

ITORIAL:

The Surgical Treatment of Perforation of Bowels in Typhoid Fever 487

Headache as a Symptom 488

Salol 488

IGINAL COMMUNICATIONS:

Intubation: J. W. Long, M. D 490

Method to Hasten Epidermization with Special Reference to Skin Grafting: Stuart McGuire, M. D. 497

Some Mistakes of a Country Doctor—Second Paper: By One of Them 504

VIEW OF MEDICAL AND SURGICAL PROGRESS 508

WER MATERIA MEDICA 521

ERAPEUTIC HINTS 524

DICAL NEWS AND ITEMS 534

Hagee's Cordial Cod Liver Oil Comp,
Tonic,
Stimulant,
Reconstructive,
Alterative,
Nutritive,
Digestive.
Causes rapid accumulation of flesh and strength, gives tone to the functions of assimilation and secretion, promotes metabolic changes, encourages healthy cell action and excretion.
HAGEE'S CORDIAL contains all the medicinal principles of pure Norwegian Cod Liver Oil without the grease. No decomposed liver tissue. No fishy odor. No eructation. Formula on every bottle.
PRESCRIBE
Cord. Ol. Morrhuae Comp. (Hagee)
and your patients will take it.
Put up in 16 oz. bottles only
KATHARMON CHEMICAL CO.
St. Louis, Mo.
NEVER SOLD IN BULK

Index to Advertisers.

	PAGE
Fairchild Bros. & Foster.....Cover	1
Parke, Davis & Co. ..... "	1
Lambert Pharmacal Co. ..... "	2
Mr. Fellows..... "	3
The Sanitarium..... ... "	4
Glycosine Phosphate Co ..... "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.	1
Martin H. Smith Co	2
Broadoaks Sanatorium.....	3
R.o Chemical Co.	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.	5
Denver Chemical Mfg. Co.....	6
Peacock Chemical Co.....	7
Od Chemical Co.	7
Allen Mfg Co.....	7
The Valzahn Co.....	7
Sharp & Dohme.....	8
Franklyn Publishing Co.	9
The Halcyon Retreat.....	9
Katharmon Chemical Co	10
Mariani & Co.	11
The Antikamnia Chemical Co.	11
Oakland Chemical Co.	12
Battle & Co.	12
Kress & Owen Co.	13
The Purdue Frederick Co.....	14
Dr. Crowell's Private Sanitarium....	14
Wm. R. Warner & Co.	523
Charles N. Crittenton Co.....	525
H. K. Mulford Co.....	527

	PAG
Leukretol Chemical Co.	5
The Abbott Alkaloidal Co.....	5
A. M Ake	5
Invalids Table Co.	5
The Keeley Institute.....	5
Dad Chemical Co.....	5
The Tilden Co....	5
Continental Plant Co	5
Chattanooga Medical College	5
University of Maryland.....	5
University of Virginia.....	5
College of Phys. and Surg. of Balto.	5
Memphis Engraving Co.....	5
The Presbyterian Hospital...	5
Sultan Drug Co.	5
The Mathewson Laboratory.	5
Robinson-Pettet Co.	5
The Botanic Drug Co.....	5
The Fairbanks Co.....	5
Wheeler Chemical Works	5
Jefferson Medical College.....	5
University College of Medicine.....	5
Jackson Springs.....	5
The Terry Heater Co	5
W. D. Allison Co.....	5
Maplewood Sanatorium.....	5
Munn & Co.....	5
R. L. Polk & Co.....	5
Presbyterian College for Women	5
Hargrave Chemical Co.	5
J. M. Echols Co.	5
N. Y. Poly. Med School and Hospital	5
Single Centre Buggy Co.....	5

Written Endorsements From More Than 8000 Physicians.

VIN MARIANI INTRODUCED NEARLY HALF A CENTURY AGO

"The Preparation which made Coca known as a remedy!"

Priority, Facilities and Processes of Manufacture

MAINTAIN MARIANI COCA PREPARATIONS INIMITABLE.

AVOID "COCA WINES" Extemporaneously made with **Cheap Wine and Cocaine.** Substitutes harm Patient and Physician and betray confidence in the unique properties of Coca.

VIN MARIANI

Represents TRUE COCA with a Sound Nutritious FRENCH WINE;

An Adjuvant to all other Remedies in

Convalescence — Wasting Diseases — Neurasthenia

THE COCA LEAF

A PERIODICAL ADVOCATING THE RATIONAL USES OF COCA

MAILED FREE TO PHYSICIANS ON REQUEST.

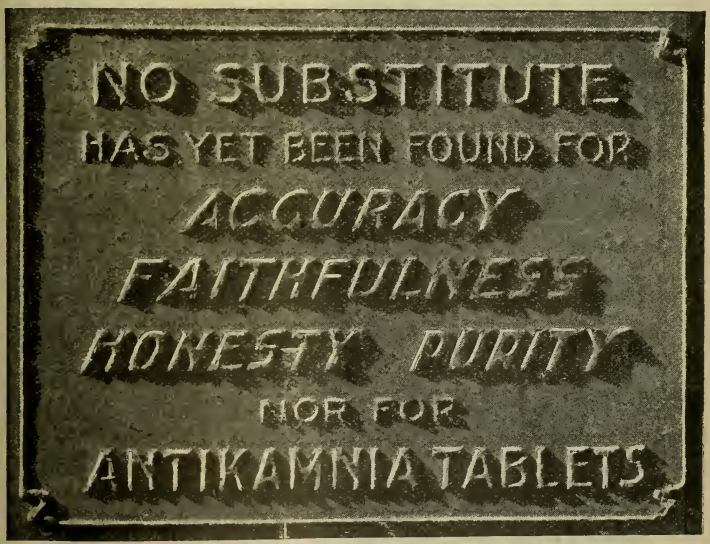
And Allied Conditions from any cause.

Inquiries from Physicians Receive Ethical Consideration.

MARIANI & CO.,

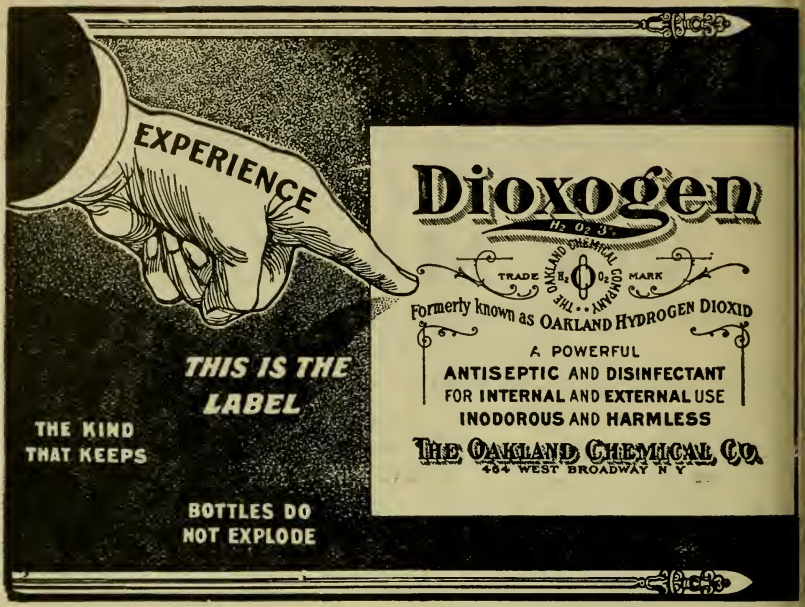
52 West 15th Street, New York.

PARIS, LONDON, BERLIN, MONTREAL. Laboratories: Neuilly Sur-Seine, FRANCE



| AK | Antikamnia & Salol Tablets
Antikamnia & Quinine Tablets | AK | Antikamnia & Codeine Tablets
Antikamnia & Heroin Tablets | AK |

When writing advertisers please mention this Journal.



BROMIDIA IS A REST-MAKER FOR RESTLESSNESS. IT GIVES CONSISTENT NERVE REST. IT DOES NOT LESSEN THE SUPPLY OF BLOOD TO ANY ORGAN OF THE ECONOMY, AS THE BROMIDES ARE SURE TO DO. IT IS A HYPNOTIC.

FORMULA:—15 grains each Chloral Hydrate and Purified Brom. Pot. and 1-8 grain each Gen. Imp. Ext. Cannabis Ind. and Hyoscyamus to each fld. drachm.

ECTHOL
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U.S.A.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions.

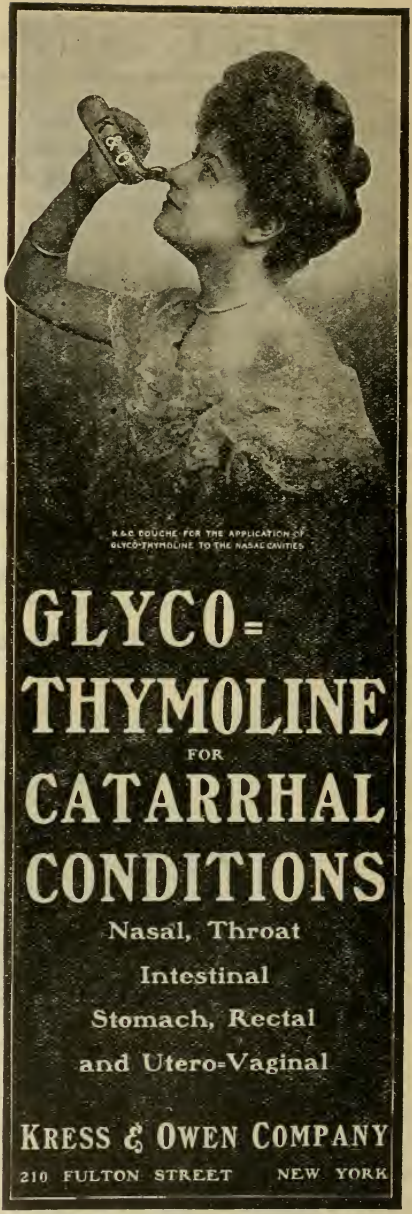
the diagnosis of appendicitis the
ion of the number of leucocytes
t valuable; yet it is well to rec-
hat there may be no leucocyto-
cases of the mild catarrhal vari-
in the fulminating cases, or in a
which the abscess has existed
ng time and is thoroughly wall-
from the surrounding structures.

hlebitis absolute immobilization
limb should be the rule during
valence of fever and for some
ter. Rubbing at this time is not
ible, owing to the possibility of
ng an embolus, itself infected,
le to cause trouble as a distance.
en all signs of fever have dis-
d, and there is practically no
ain, massage must be begun and
d in, gently and for a long time.

r treat a persistent case of ure-
ouble in the male without ex-
the seminal vesicles. Many a
cured after a short period of
e of the vesicles that has been
treatment for years in other

r be tempted to use catgut for a
ial suture. If it passes through
n it may serve as an efficient
or as well as a culture medium
ms. It is not very efficient in
g cut edges together and it may
ay before the time at which its
e could be spared as a retain-
nt.

ever blood, serum or any other
ge shows at the edges or at any
art of a dressing, the latter
be changed, since the secretion
to the air is apt to become in-
and this process is likely to ex-
ter a short time down to the
—*International Journal of Sur-*



THERE IS NO OTHER

reason for the conservative scientific physicians' unqualified endorsement and extensive employment of

GRAY'S Glycerine TONIC Comp.

than the simple fact of intrinsic merit. It yields incomparable results in general debility, anæmia, malnutrition and nervous exhaustion.

THE PURDUE FREDERICK CO.,
No. 15 Murray Street, New York.

Dr. Crowell's Private Sanitarium

FOR THE TREATMENT OF

Alcohol, Tobacco and Drug Addiction.

Special Apartments and Nurses for Lady Patients.

S. M. CROWELL, M. D., Medical Director, 10 N. Church St., Charlotte, N.

"No physician can afford to be indifferent regarding accurate filling of his prescription"

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., OCTOBER, 1903. No. 10

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

Subscription $1.00 per year, in advance.
Subscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
Receipts.—The receipt of all money is immediately acknowledged.
Important Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it continued expecting to receive a remittance at their earliest convenience.
We Notify all subscribers when their paid subscription expires.

EDITORIAL.

THE SURGICAL TREATMENT OF PERFORATION OF BOWELS IN TYPHOID FEVER.

It was in 1898 that Dr. Keen, of Philadelphia, published his monogram on the surgical complications of typhoid fever, and he then collected and analyzed some 83 cases of perforation of the bowel that had been operated upon. Since that time the surgical treatment of this class of cases has received very general attention, and a recent writer has collected 332 cases of operation for typhoid perforation. Of this number, 243 died, while 87 recovered, a mortality of 73.7 per cent. While this is, and probably will continue to be a very gloomy field of surgery, the results, when we consider the almost uniformly fatal issue in this complication, cannot be deemed entirely discouraging. Such advance as has been accomplished is along the line of early diagnosis, prompt operative interference and improved technique. In all probability we have reached the limit as regards the latter. The diagnosis still leaves much to be desired. Reports of cases would indicate that the classical symptoms of perforation are by no means present in all instances, particularly in very recent perforations, and an effort has been made to distinguish between the perforative stage and the actual perforation. As yet this cannot be done.

In addition to early diagnosis and prompt operation, the time consumed in making the abdominal incision, finding and closing the opening in the bowel, materially affects the chances of the patient. Some authorities claim that 30 minutes should be the limit, and many report the completion of the operation in much less time.

As regards the method of treating the perforation, it has lately been suggested that the bowel be stitched to the abdominal incision instead of closing the perforation in the usual manner. The intestines would thus be effectually drained, and the danger of a resulting paresis from peritonitis prevented. This plan would be especially adapted to cases of very large perforation. Respecting the mortality in typhoid per-

foration treated upon the expectant plan, it is interesting to note that some writers are of the opinion that about five per cent. recover spontaneously. The difficulty of such a statement, however, lies in its proof, it being practically impossible to be absolutely sure that perforation exists in a given case without a surgical or post mortem demonstration.

HEADACHE AS A SYMPTOM.

The September number of the *California State Journal of Medicine* contained a very valuable paper that was read before the California State Medical Society at its 1903 meeting by Dr. H. Bert Ellis, of Los Angeles, professor of opthalmotogy in the medical department of the University of Southern California.

Dr. Ellis takes a broad, comprehensive view of headaches in general, recognizing the fact that many chronic and recurring headaches are often due to other causes than ocular defects. From his observation he gives his opinion that occipital headache is seldom due to eye strain, but on the other hand that it is the chief factor in 80 per cent. of all headaches of the fronto-temporal variety, and of 60 per cent. of all headaches. According to Dr. Ellis, headaches of ocular origin are oftener dull than sharp, and are very liable to be worse after using the eyes at close work, usually disappearing when work at close range is discontinued. These headaches occur generally within a few hours after the eyes have been taxed, but may hold off until the next day, especially when the eyes have been used much at night. In patients subject to sick headache, it is the part of wisdom to carefully look for eye defects, as they occur in sixty per cent. of such cases.

Neurotic headaches and headache that come on in the night are not often relieved by the correction of ocular defects that may be present.

The most fertile cause of ocular headache is slight degrees of astigmatism so slight, in fact, that vision seems to be perfect.

Nervous exhaustion from any cause is often responsible for headache, particularly after mental effort or worry.

The headache due to anaemia is frontal; stomachic and hepatic headaches are occipital or vertical, but they may be frontal or general. Toxic headaches are frontal and deep seated; headache due to syphilis is neuralgic in character and limited to the temples. Neurosthenic headache, which is generally toxic and will continue after every source of peripheral irritation has been removed, must be differentiated from simple ocular headache.

SALOL.

Salol is by no means a new remedy, but has not attained the position in practice it should hold. Its anti-pyretic powers, though considerable, are hardly equal to some of the other phenol preparations. An advantage in its use is that the sweats following its administration during a pyrexia, are not as profuse nor as depressing as others of the coal tar group of remedies. As an anodyne its utility is better shown in rheumatism or in persons with rheumatic diathesis. In these it is especially useful, reducing the temperature and alleviating the pain to a marked degree. The salicylic acid of the combination (salycilic acid 60, carbolic acid 40—by weight) forming salol makes it very valuable as an adjuvent to the remedies useful in this trouble. It is not claimed for salol any very great superi-

ority over the salicylates generally in the treatment of rheumatism. Its tastelessness is a factor in its favor.

The strong point in salol's candidacy for therapeutic use, is its prominence as an intestinal antiseptic. Being insoluble in water and the gastric juices, its two elements are liberated in the canal by the action of the intestinal juices, and both a local and systematic effect thereby produced. It is this property as a germicide and anti-ferment that has not been sufficiently understood by the profession, or at least has not secured recognition adequate to its merits. In torpor of the liver, jaundice, duodinal catarrh and catarrhal states of the bowels it is very beneficial. In any and all cases of a fermentative condition of the bowels, its administration will be attended with beneficial results.

Cases of morning diarrhoea, requiring the patient to be up in the latter hours of the night and the early morning—perhaps several loose evacuations —perhaps only a slight flatulency—yield readily to a five grain capsule of salol admistered on retiring. The latter stage of dysintery is benefited by small doses, two to three grains every four hours. Its germicidal properties sanction its use in all morbid conditions of the intestines caused by the presence of bacteria.

It can be used locally either as a dusting powder, or it is readily dissolved in alcohol, turpentine or oil, and can be mixed with vaseline if desired. It is recommended in ozena, chancre, gonorrhoea, etc., and as a substitute for iodoform on account of its more pleasant odor. The writer has but little personal experience of its use locally.

Salol belongs to the phenol group and the same care is to be exercised in its administration as in the other of its class. No more care is needed for it, possibly not as much, but the amount of carbolic acid contained in the preparation demands that the effect of its administration be watched. The dose is from five to twenty or even thirty grains. It is only when the anti-pyretic effect is wanted that the larger doses are indicated. For intestinal antisepsis more than five grains will rarely be needed.

It is reported that a certain society for the prevention of cruelty to animals has gravely proposed to establish a special cemetery for cats and dogs, and is soliciting funds with that end in view. The human mind tends towards extremes and the action of this society causes one to cease wondering at the credulity of some of the ancients who worshipped animals. In the eyes of such zoophites the suffering and destitution of a fellow man is of less consideration than the burial of a dead cat. We would protect all animals against wanton cruelty, but after they are dead there are more important matters to engage our attention.

There seems to be a growing tendency, according to the *Journal of the American Medical Association,* for the better class of medical colleges to fill the vacancies in their teaching force with men who will devote their whole time to hospital laboratory work and to teaching. The *Journal* thinks that this is a proper and rational tendency, but is also of the opinion that there should always be a certain proportion of teachers who are actively engaged in private practice, since at the present time the difference between hospital and private work is quite marked.

The Carolina Medical Journal

COLLABORATORS.

H. T. Bahnson, M. D., Salem, N. C.
J. Howell Way, M. D., Waynesville, N. C.
J. Allison Hodges, M D., Richmond, Va.
S. Westry Battle, M. D., Asheville, N. C.
Geo. G. Thomas, M. D., Wilmington, N. C.
J. P. Munroe, M. D., Davidson, N. C.
Manning Simons, M. D., Charleston, S. C.
S. C. Baker, M. D., Sumter, S. C.
R. L. Payne, M. D., Norfolk, Va.
H. S. Lott, M D., Winston, N. C.
J. W. Long, M. D., Salisbury, N. C.
H. A. Royster, M. D , Raleigh, N. C.
Albert Anderson, M. D., Wilson, N. C.
Francis L. Parker, M. D., Charleston, S. C.
Chas. W Kollock, M. D., Charleston, S. C.
Davis Furman, M. D., Greenville, S. C.
F. Julian Carroll, Summerville, S. C.
Translation and Foreign Reviews, Richard H. Whitehead, M. D., Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.

Contributors for the Original Department of The Journal are received, with the understanding that they are contributed exclusively to this Journal.

Illustrations necessary to elucidate the text will be provided without expense to authors when suitable ink drawings or photographs are furnished.

Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

Intubation.

By J. W. Long, M. D., Greensboro, N. C.

Importance.—I am impelled to present this paper because there is no community that does not count among its dead one or more children who died because there was not a skilled intubator within reach, and for the additional reason that no general practitioner can be certain when he lies down to sleep that he will not be called before morning to see some child suffocating to death.

Joseph O'Dwyer won for the operation of intubation a secure place among established procedures, which is shown by its acceptance by the profession and the surprising fact that neither the instruments invented by the author nor the manner of doing the operation as practised by him have been improved upon in any essential particular.

Intubation was designed to fill a long felt want, and not to take the place of some other operation, since tracheotomy, the nearest approach to intubation, had been practically abandoned as being of scarcely any value in cases of membranous croup.

So fully has intubation met the expectations of its distinguished inventor that no community should be without the advantages of this life-saving operation.

Indications.—At least 98 per cent. of the patients we are called upon to intubate are the subjects of diphtheritic laryngitis, which may be taken as the type of intubation cases. But the field of its application covers a number of other pathological lesions. While all cases of membranous laryngitis should be regarded as diphtheritic until the contrary is proven, yet occasionally a case is seen in which the most diligent research fails to reveal the presence of the Klebs-Loeffler bacillus. The writer saw such a case, by courtesy of Dr. J. H. Jopson, about a year ago, in the Children's Hospital, Philadelphia. The child had been intubated but had been given no antitoxin; and although in a

crowded ward, there was no spread of the disease.

Acute oedema as in Quinke's disease, intra-laryngeal growths, ulcerations, paralysis, adhesions and contractions, especially those following tracheotomy, may demand an intubation.

Operator.—The technic of intubation is so easy and the necessary instruments are comparatively so cheap that it is surprising that more physicians do not properly equip themselves to do this work.

We cannot all be abdominal surgeons, nor can all men learn to intubate, let them try ever so hard. Even those who are skilled and justly renowned for their work, in other departments of surgery, often fail to intubate the larynx. One may be able to catheterize the ureter and yet not be able to intubate larynx. This is largely due to the fact that the one is done under the guidance of the eye, while the other is accomplished almost entirely by the sense of touch. It is also perhaps true that some men can never learn to intubate, because of short, thick fingers or an inherent awkwardness; but the writer is convinced that the vast majority of practioners may become accomplished intubators—if only they go about it in the right way.

The right way, in a word, is by practice on the cadaver, under the tutelage of a competent teacher, and not upon dying children, as it must be admitted is sometimes done.

A member of this society recently intubated several cadavers 500 times. When he came to intubate his first patient, the family became stampeded and left, as they often do, and he had no help except that of a little negro, yet despite all this he succeeded in putting the tube in the larynx. Another physician has never practised on the cadaver, but uses children dying with diphtheritic laryngitis. It is not necessary to say that his results are usually just what the other man started out with—a cadaver. In addition to the proper training, the operator should, of course, have self-possession, a steady hand, a delicate sense of touch and that peculiar quality in his personal equation that enables him to form an opinion *instanter,* in the midst of the most trying circumstances, and to act promptly. There is perhaps no emergency that calls for more nerve than these cases of obstructive laryngitis sometimes do.

Above all, the operator ought to be endowed with the facutly of telling the truth. On a number of occasions the writer has been shocked by would-be operators intubating (?) the oesophagus, and when the child coughed or vomited the tube out, tell the heart-broken parents that the tube would not stay in the larynx.

Outfit.—The first essential is, of course, an O'Dwyer set. Do not be induced to buy a set because it is cheap, but get the best that can be found. The writer was fortunate enough to secure a set that O'Dwyer had put the seal of his personal endorsement upon. Their weight in gold would not buy these instruments. But those equally as good are easily obtained.

O'Dwyer used metal tubes, but one of his last inventions just prior to his death was the hard rubber tube with a metal lining. The rubber tubes are the most popular now, because of their light weight and the belief that they are less easily encrusted. The writer uses both kinds but confesses to a leaning toward the original metal tube.

Every outfit should contain a double

set of tubes. The writer's grip contains several of each of the sizes usually employed. This is necessary for various reasons; the tube needed may be in use, the child may cough the tube up and swallow it, as happened once in the writer's hands, or the tube might get misplaced, besides in removing the tube the first time it is always proper to have another tube of the same size threaded and on the introducer. Sometimes tubes of special design are required but a man may feel safe with a good supply of O'Dwyer tubes on hand; special ones can be gotten later.

For his own convenience and the benefit of his patrons, the writer keeps the following articles constantly packed in a grip made of fiber that can be washed:

Two full sets of O'Dwyer instruments.

Antitoxin syringe.

Three thousand units of diphtheritic antitoxin.

Tracheotomy instruments: Scapel, three clamps, scissors, needles, silk, hair pins and rubber catheter.

Instrument tray.

Linen duster.

Rubber gloves.

Adhesive plaster.

Matches.

Antiseptic tablets.

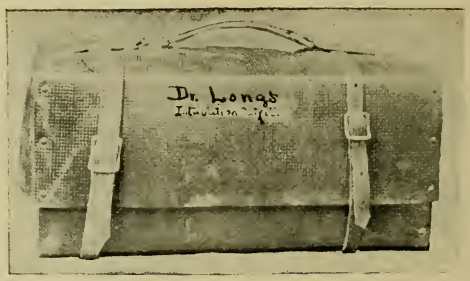
Towels.

Spool flax thread.

Cotton pledgets.

Gauze.

Antitoxin.—We cannot discuss the subject of intubation intelligently without giving due consideration to its strongest ally—antitoxin. It would be a work of supererrogation to tell this body of the value of serum therapy in diphtheria. Really the antitoxin is the curative agent, even in laryngeal cases. The tube simply keeps the larynx open till the antitoxin gets in its work. Without antitoxin intubation, invaluable as it is, is not sufficient to cope with larynxgeal diphtheria, since it was only able to reduce the mortality from 98 to 69 per cent., while together they have reached the death rate to 5 per cent.



This Grip contains everything shown in the next cut.

As in diphtheria of other organs, to get the best results, antitoxin must be given early and in large doses, never less than 2,000 or 3,000 units, repeated every few hours; giving it till good results are obtained, even to the amount of 40,000 or 60,000 units. In extreme cases it has recently been given intravenously.

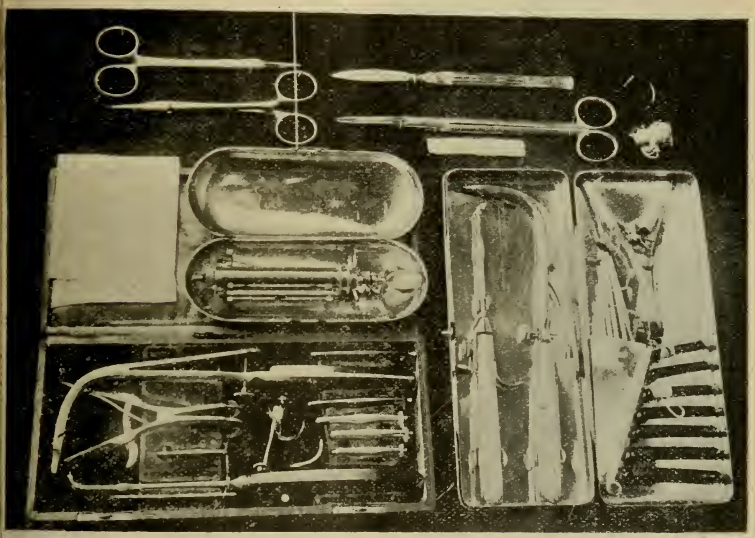
One point worthy of emphasis is

that if antitoxin is given properly as to time and dose, fully one-half of the laryngeal cases that would otherwise have to be intubated will escape operation.

Operation.—The later text books describe very fully the operation.

The child held on the lap in the upright position as though suspended from the top of the head, is the most usual position. More recently some operators prefer the prone position. An expert operator can introduce the tube with the child in any position, the only essentials being that the child's mouth be open and the operator's finger on the glottis.

It is not the purpose of this paper to go into details, but the writer has found one little point of invaluable assistance to him in intubating. As soon as it is felt that the end of the tube has entered the larynx, pass the finger quickly into the oesophagus, when if the tube has properly engaged the posterior laryngeal tissues will be felt between the tube and finger, and we may know that the tube is not going into the oesophagus. With this assurance, push the tube gently home, following the tube as you would a urethral sound, for here, as in the urethra, there is danger of making a false passage, or inflicting other serious trauma. This precaution of feeling the posterior wall of the larynx from the oesophagus is not mentioned in any text book, so far as the writer knows, but it is of such great value that if observed the difficulties of intubation would largely disappear.



Dr. Long's Intubation and Tracheotomy Outfit.

Care of an Intubated Child.—This is very trying to the surgeon, since it means constant attendance or to be in very close touch so that he can be

called at a moment's notice. It is better that he sleep at the patient's home. The writer, under such circumstances, has had to intubate before he would get time to put his clothes on—so severe was the dyspnoea.

Formerly it was the custom to leave the string attached to the tube, but it is probably better to remove it as soon as

G. S., aet 9 mos., wearing a tube and taking his milk in the exaggerated Casselberry position.

it is seen that the larynx tolerates the presence of the tube.

The extracter, introducer, and another tube of appropriate size with a string in it, should always be kept within easy reach, and not packed up in the case, for even the time lost in threading the tube might prove fatal to the patient.

Feeding the patient is often a difficult matter. The writer recalls one patient that would take no food during the 48 hours the tube was worn. Ordinarily, however, the little sufferer will try to take both food and drink. The child can usually swallow better lying down, or as in one of the writer's cases, with the head hanging very low, the exaggerated Castleberry position. Some patients can both eat and drink while sitting upright. Semi-solids can be gotten over the tube better than liquids or solid food. Boiled custard and gelatin are good types of the proper food. After a child has worn a tube for some time, he can swallow anything as well as ever he could. Some times forced feeding by the tube and funnel must be resorted to.

The room should be kept filled with steam or the child occasionally placed in a steam tent, since steam moistens the air-passages and enables the patient to cough up the membrane and secretions with greater ease, thus helping to keep the tube open.

Extubation.—To many men this is more difficult than is intubation, and the trauma often resulting therefrom may be quite serious, even necessitating the re-introduction of the tube. The writer has not found removal of the tube by means of the extracter a difficult matter. Some operators prefer to leave the string attached to the tube by which means the tube is readily withdrawn, while others practise enucleation by pressure from the outside.

Again, when extubation should be done, is an important matter. Formerly the tube was left in for a week or more, but the practise now is to remove it early. The tube was not removed from one of the writer's earlier cases for 19 days, while he removes it in 2 to 4 days. One patient coughed out the tube in 36 hours and it was not necessary to re-introduce it. One of the

physicians who has had large experience in the Municipal Hospital for infectious diseases in Philadelphia, told the writer that in that institution, it was considered a favorable termination for the tube to be coughed out after a short while, say three to five days. This does away with the trauma of extubation.

Before extubating, another tube on the introducer and with string attached should be provided, since an immediate re-intubation may become necessary. The child should not be left for an hour or more; and for a day or two, at least, the surgeon should be within easy call, because we can never be sure that there will not be a return of the laryngeal obstruction; indeed, this may happen at any time within two weeks.

Retained Tubes.—The vast majority of intubated patients do not need to have their tubes replaced when once it is withdrawn, but occasionally it is necessary to reintubate not only once, but many times, until it really seems like the normal condition of the little patient is with a tube in his larynx. Children have been known to retain their tube throughout the remainder of life, and an uncomfortably large percentum are compelled to wear the tube for many months, as did a case to be reported in this paper.

However, the average period of time a retained tube is worn may be estimated in days and not in months. Dr. Shurley's average (infra) was only ten days.

Fortunately, the retention of a tube longer than what might be called the normal period is exceedingly rare. The writer has met with only one genuine case of prolonged intubation. Dr. B. R. Shurley reports 230 intubations with only 9 cases of retained tube (*New York Medical Journal*, July 13, 1901). Dr. Dillon Brown, in a personal communication says: "With an experience covering over a thousand cases of intubation for membranous laryngitis, I have seen only 9 or 10 cases of retained tube."

It is not pertinent to this paper to go fully into the subject of retained tubes, but it might be stated in passing that the causes of this condition are not fully understood. It is believed, however, that the following conditions named in the order of their importance are among the chief causes: Intense inflammation of the larynx, the presence of vegetations, ulcers, and paralysis.

To go back a step further and inquire into the factors that produce these conditions would lead us far astray. The three principal etiological factors are probably the virulence of the diphtheritic poison, a badly fitting tube, and the trauma produced by an unskilled operator.

Brief Synopsis of a Case of Retained Tube.—January 11th, 1902. W. H. at two and a half years, was seized with diphtheritic laryngitis. The writer saw the case in consultation at four-thirty on January 14. At this time the child's condition was extreme, and an hour or two more would certainly have ended his life. Three unsuccessful attempts to intubation had been made, and 6,000 units of antitoxin had been given within the preceding six hours.

A tube was at once introduced which gave immediate relief to the dyspnoea and changed the whole picture.

Eighty hours thereafter the tube was removed, but the dyspnoea returned at once and the tube had to be replaced; 2,000 unites of antitoxin were also given. Two days later, while the child was on his hands and knees, the tube

fell or was coughed out. Dyspnoea developed at once and the child came near dying before help could reach him. In forty-five minutes the tube was coughed out again and was at once replaced. This time it was almost immediately coughed out of the larynx and swallowed. It looked for a while as though the little fellow would surely die this time, since no other tube was at hand, and he had quit breathing and was as black as carbonic acid will make a person. With very crude instruments a tracheotomy was hastily done and suspended animation restored by artificial respiration. A little later an O'Dwyer tube was secured and introduced, when there was no further need for the tracheal wound.

To make a long story short, this little fellow wore a tube for five months, lacking three days, and during that time was intubated and extubated about fifty times. He is in perfect health at this time.

Throughout the management of this very trying case, invaluable assistance was rendered the writer by Dr. John Whitehead, of Salisbury. Even then we never would have "won out" had it not been for the good sense and co-operation of the family.

Tracheotomy.—Prior to the discovery of antitoxin, tracheotomy had fallen much into disrepute, in this country at least, since it had proved of little service in diphtheritic croup, except as a means of letting the little sufferer die easier. From 1869 to 1880, no case of tracheotomy was performed for diphtheritic croup in the New York Foundling Hospital. (*Northup in Northuagel's Encyclopedia of Medicine,* page 170.)

However, antitoxin gives to tracheotomy, as to intubation, better results.

It should perhaps never be the operation of choice, but under certain conditions, it may, with propriety, be resorted to. These conditions are briefly Absence of intubation instruments, inability to intubate, intolerance of the tube by the larynx and failure of intubation to give relief. It is readily seen that most of these indications may be removed. Interesting as this phase of the subject is, it must be passed by without further notice.

Report of Cases.—The writer has had thirteen cases of intubation since November, 1897, with eleven recoveries As twelve of these cases have been reported, only the last one will be given here.

Case XIII.—G. J.'s baby, male, age 18 months, has had bowel trouble for three months, but is better at this time. For three weeks has had a sore throat with enlargement of the glands under the angle of the right jaw. On September 28th, 1902, the baby was slightly hoarse. The hoarseness gradually increased till the night of the 29th, when the voice was almost gone and dyspnoea was marked. On the 30th the child's condition was worse, and Dr. J. B. Councill, the attending physician, gave at 11:30 A. M. 500 units of antitoxin. At Dr. Councill's request the writer saw the case at 12 M., with himself and Dr. H. L. Tranthum. The child's condition by this time was critical. A membrane covered the right tonsil and a small spot was observed on the left tonsil. The cervical glands on both sides were enlarged and tender. Dyspnoea was pronounced, with recession of the soft parts and lower end of the sternum. Cyanosis showed itself in the lips and under the nails. Fine and coarse were heard throughout the

iest. The pulse was frequent and fee-
le.

A No. 1 O'Dwyer metal tube was
uickly introduced which gave immedi-
e and entire relief to the dyspnoea
id cyanosis. 1,500 units of antitoxin
ere also given. The record shows
ctober 1st, 9 A. M., pulse 150,
spiration 28, temperature 102.9. Slept
ood deal throughout the night, coughs
intervals, bowels have moved, kid-
eys acted, and takes gelatin and white
egg greedily. Gave 1,000 units of an-
toxin October 2nd, 9 A. M. Temper-
ure 102.3, pulse 140, respiration 28.
t 5 P. M. temperature has fallen to
).3. October 3d, 9 A. M., temperature
)o. Condition rapidly improving. At
A. M. the tube was coughed out, just
hours after introduction. The dys-
ioea not returning, the tube was left
it. Convalescence was rapidly estab-
hed.

Remarks.—This is a fairly typical
se of intubation for dyphtheritic
ryngitis. An infant develops sore
roat; the membrane first forms on
e tonsils; then invades the larynx;
honia and dyspnoea rapidly super-
ne; bronchitis, pneumonia and cyan-
is soon set in, and the little fellow is
ved only by a prompt intubation and
eral doses of antitoxin; in this case
)00 units.

One of the cases that died, previously
ported, ought to have gotten well,
ice it had every appearance of be-
g a favorable case for recovery,
d the little fellow did all right
the father, who was nursing
m let him jerk the tube out of his
roat, and he was dead before help
ached him. In other words, the child
d without the tube in his throat.

The writer confesses that he does
t know why the other child died.
The introduction of tube gave immediate and prompt relief, which lasted for fourteen hours, when dyspnoea gradually came on again. When seen at this time, it was at once surmised that the tube was occluded, but on removing it, it was found to be clear. It was then thought that the membrane had extended below the tube, but a hasty tracheotomy revealed the trachea to be free of membrane. It is possible that the fatal dyspnoea was of cardiac origin.

Results.—Eleven lives saved out of thirteen, or a mortality of only 15.33 per cent. is an eloquent plea for any operation, but even these statistics may be, and have already been, greatly improved upon; in fact, a 5 per cent. mortality may be safely taken as an average, and this is far better than the best abdominal surgeons could show for many years, and their cases are not always life and death cases, while those of membranous croup are.

With intubation and antitoxin combined, diphtheritic croup, one of the most deaded of all diseases, is largely robbed of its horrors, and we may confidently assert that one more enemy of the human race has been, if not conquered, greatly incapacitated.

Methods to Hasten Epidermization, With Special Reference to Skin Grafting.*

By Stuart McGuire, M. D., Richmond, Va., Professor of Principles of Surgery and Clinical Surgery, University College of Medicine; Surgeon in Charge St. Luke's Hospital; Visiting Surgeon Virginia Hospital; Consulting Surgeon Home for Incurables, etc.

Every practitioner is frequently called on to treat loss of cutaneous surface

*Read at the meeting of the Medical Society of Virginia held in Roanoke, September 15-17, 1903.

due either to injury or disease. If the area is small repair is usually rapid and complete, but if it is large, repair often progresses to a certain point and then ceases. In the one case the capacity of the germinal cells is sufficient to meet the demand made on them; in the other the amount of material required is more than they can produce.

It is the object of this paper to discuss methods to hasten healing in cases where the process is slow or at a stand still. No effort will be made to review the literature of the subject and only the results of practical exeprience will be given.

To secure epidermization the first step should be to stop suppuration. The second should be to stimulate normal regeneration and to protect the embryonal cells resulting. The third, in case the first two are insufficient, should be to augment nature's reparative forces by grafting the bare area with epithelial tissue of sufficient vitality not only to live but to grow.

These three indications for treatment must be followed in the management of every granulating wound, whether it be a small ulcer or an extensive burn. They cannot be carried out independently, but must be combined. They will not be discussed separately, but collectively under the different dressings commonly employed.

Moist Dressings.—After the preliminary cleaning of the wound and adjacent surface, the first treatment usually tried is the moist dressing, the character varying from the cold water dressing of our forefathers to the moist corrosive sublimate dressing of the antiseptic extremist of the present day. The method of application consists in saturating a pad of absorbent cotton with the fluid selected, applying it to the raw surface, and preventing rapid evaporation by covering it with a layer of oil silk. The cotton should be wet as often as it becomes dry, and should be changed as often as it becomes soiled. The solution employed should not be too strong antiseptic, as it would kill cells as well as germs, but it should have an inhibitory action on microbic life. The three that will be found most satisfactory are *chloral hydrate solution* (chloral hydrate dr. 1, water oz. 2); *Thiersch's solution* (salicylic acid dr. ½, boric acid dr. 3, water oz. 2), and *acetate of aluminum solution* (alum dr. 6, acetate lead dr. 9½, water oz. 2). These may be used either hot or cold and should be employed in conjunction with rest and elevation. I have had many swollen and rebellious leg ulcers come to me scarred with caustics, gritty with antiseptic powder or filthy with greasy ointments, but not one that did not yield readily when the patient was put to bed, the limb elevated and the part treated with hot chloral dressings.

Dry Dressing.—The treatment of granulating surfaces by dusting them with antiseptic powders has been made undeservedly popular by the advertisements of firms that had proprietary preparations to sell. The powders most frequently employed are iodoform, aristol, dermatal, bismuth, boric acid and oxide of zinc. In some cases they do good, but in most instances they do harm. Chemically they destroy germs and lessen suppuration; mechanically they destroy embryonal cells and retard healing. When first applied to a wound decided improvement is seen, but continued use is followed by irritation due to absorption of serum and the formation of crystalline concretions that act as foreign bodies, or broad incrustations that prevent the escape of pus or

ther wound secretions. I am free to ay that I do not use dusting powders. There has not been a grain of iodoform n my private hospital for the last three ears, and its banishment has not roved detrimental to patients but exeedingly beneficial to the atmosphere f the institution.

Oleaginous Dressings.—The use of alves and ointments in the treatment f superficial wounds has fallen into nmerited disfavor. Because, before ie day of antiseptic surgery, they were bused is no reason why they should ow no longer be used. Some prepaations quickly become rancid and ould be avoided; others remain sterile definitely and may safely be employd. Vaseline, lanoline and castor oil, lain or medicated, will give better reults in some cases than any other aplication. They exert a feeble antisepc action, thus lessening suppuration; ey exclude the air, thus relieving ain; and they prevent the adhesion of verlying dressings, thus saving the mbryonal cells from mechanical injury. n extensive burns I have found nothg better in the early stages than a 5 r cent. mixture of ichthyol and vaseie, and in sluggish granulations, espeally of a tuberculous character, I ave never failed to see good come om the application of a combination 1 per cent. carbolic acid, 5 per cent. eru and 94 per cent. castor oil.

Nutritive Dressings.—Considerable enefit will some times be derived in e treatment of a granulating wound the use of a dressing that supplies od directly to the germinal cells and eir offspring. Proliferation is often rested by stravation and feeding is e logical remedy. The agent emoyed should be aseptic, non-irritating, d should contain nutritive material in an easily absorbable form. The preparation that in my opinion most nearly meets these requirements is Valentine's Meat Juice. It is sterile, contains no alcohol, is rich in food stuff, and has practically the same percentage of sodium chloride as the normal serum of the blood. It should be diluted with three-fourths water, warmed to the temperature of the body, and applied on cotton in the form of a moist dressing. My experience has been that it does a great deal of good for a short while, but then loses its effect. As soon as pale granulations become pink and healthy it has fulfilled its function and should give place to some other dressing.

Alterative Dressings.—Cells, like individuals, sometimes, without assignable reason, develop dusturbances of nutrition requiring alterative treatment. In the management of a granulating wound there is often call for local medication. Experience alone can teach the surgeon the agent to employ and the time and method of its application. Nitrate of silver, mercurial ointment, chloride of zinc and sulphate of copper are all useful and time-honored remedies. Among newer preparations must be mentioned protonuclein. I have several times seen indolent or foul granulating areas that had defied a half dozen other lines of treatment improve under its use as if by magic.

Protective Dressings.—In direct contrast to granulating surfaces that need stimulating or alterative treatment are those that are doing well and only require protection. When the wound is healthy and healing progressing satisfactorily nothing is more mischievous than meddlesome interference. All that should be done is to prevent infection by cleanliness, and to avoid injury to

the newly formed cells by mechanical protection. Cleanliness is secured by changing the dressings as frequently as they become soiled and bathing the wound with normal salt solution. Protection is best accomplished by interposing some impervious material between the granulations and the meshes of the overlying gauze, into which they would otherwise become entangled. In my experience the best results follow the use of strips of rubber dam, collodion film, or Cargile membrane, placed lattice-wise so as to afford drainage. Rubber dam is the material used by dentists and can be sterilized by boiling. Collodion film can be prepared by pouring collodion on an antiseptic sheet of glass, allowing it to harden and then cutting it in strips. Cargile membrane is made from the peritoneum of an ox and can be bought on the market in germ proof envelopes.

Proliferating Dressings.—When the destruction of skin is so extensive that the normal reparative power is insufficient to cover the granulating area with epithelial cells, recourse must be made to skin grafting. It has long been known that bits of cuticle properly planted on fresh wounds or healthy granulating surfaces would become adherent and grow, thus protecting underlying structure and acting as independent foci of epidermization for adjacent tissue. The application of this fact with epithelial cells secured from different sources and applied by various methods has enabled the surgeon to heal wounds quickly and certainly which otherwise would be slow to close or perhaps become permanent ulcers.

Skin grating, when practiced on newly made wounds, is called primary grafting. When practiced on granulating surfaces it is called secondary grafting. If the surface be a fresh one care must be taken to perfectly arrest hemorrhage before applying the grafts otherwise bleeding will detach them. If the surface be an old one, care must be taken to stop suppuration before applying the grafts, otherwise pus germs will devitalize them.

Skin grafts may be obtained from the patient and then are called autographs; they may be cut from another person and then are called heterographs, or they may be secured from an animal and then are called zoographs.

There are three recognized methods of skin grafting. Reverdini's, consisting in cutting small particles from the superficial layers of the skin with scissors and planting them at intervals over the surface to be covered. Thiersch's, consisting in cutting broad strips from the superficial layers of the skin with a razor and placing them so as to completely cover the wound area; and Wolfe's, consiting in the dissection of a piece of skin the entire thickness of the structure and fitting it to the defect to be remedied.

The dressing after any of the above methods, consist of lattice work of protective strips over which is placed a pad of gauze wet with normal salt solution. This should be removed and replaced at the end of the third day, and the subsequent management of the case carried out on general surgical principles.

The instruments required for skin grafting are so few, the operation itself so simple and the results secured so immediate and satisfactory, that the surgeon who does not avail himself of it in suitable cases does an injustice both to himself and his patient.

Primary Skin Grafting should be employed after the removal of an epi-

thelioma or other superficial growth, provided infection can be prevented, hemorrhage arrested and ligatures and sutures avoided. The depression due to the removal of tissue will fill up beneath the grafts and the deformity will be less than anticipated. I have removed a growth the size of a silver dollar from a nose, grafted it at once with skin from the arm, and discharged the patient with a perfectly healed wound in ten days from the operation.

Secondary Skin Grafting should be employed when ligatures are used to arrest bleeding, or sutures to secure partial coaptation; where infection is likely or already exists; or where the excavation is deep and a large amount of granulation tissue is necessary to fill it. In operating for cancer of the breast, where approximation of the margins of the wound is secondary to extirpation of the diseased tissue, I remove the malignant growth as completely as possible, bring the cut edges of the skin together as nearly as practicable, apply a protective dressing, and a week or ten days later remove the stitches and then skin graft the granulating area.

Reverdin's Method should be employed where the area to be covered is small, and where the administration of a general anesthetic is contraindicated. The surface to be grafted and the site from which the grafts are to be taken should both be prepared. The skin is then elevated into a cone by means of a sharp tenaculum and a small piece snipped from its superficial layer by means of a pair of curved scissors. The fragment is at once transferred to the area to be grafted and carefully seated in the granulations, care being taken to prevent the edges curling inward thus preventing apposition of raw surfaces. This is repeated until a sufficient number of grafts have been planted to thickly stud the bare area. The operation of cutting the grafts can be made painless by the use of the chloride of ethyl spray. I have found the above method very satisfactory, especially in weak, nervous patients where a more formidable operation would have a bad effect. The space between the grafts is rapidly covered and the resulting scar is good.

Thiersch's Method should be used when the surface to be covered is large and when the patient is either under an anesthetic or its administration will be compensated for by the more rapid recovery it promises. The grafts are obtained by making the skin tense and flat, either manually or by special hooks and by cutting off the superficial layers by a to and fro sawing motion of a sharp razor. The larger the size of the grafts the better. Usually they are an inch wide and four or five inches in length. Care should be taken to remove only the upper layer of the skin, otherwise the wound inflicted may prove as difficult to cure as the wound the surgeon is endeavoring to remedy. As the grafts are cut they are dropped into a basin of warm saline solution. Afterwards they are carefully placed on the area to be grafted, the edge of one graft overlaping that of the adjacent one. Thiersch's method of skin grafting is the one most frequently practiced and the one that gives the most brilliant results. The objections to it are that it necessitates the use of an anesthetic and the site from which the grafts are cut is painful and takes some days to heal.

Wolfe's Method should only be employed in exceptional cases. The surface of the area to be grafted should be thoroughly revivified and the margins made fresh and vertical. All bleeding

should be completely arrested. The new skin to be used as a graft must be dissected from some other site. The entire thickness of the skin should be removed but no subcutaneous fat taken with it. The outline of the incision should preferably be an ellipse to permit of closure of the defect by sutures. The skin removed should be one-third larger than the defect to be covered to allow for shrinkage. The graft, after having been placed in its new position, may be retained by sutures or reliance placed on overlying dressings. The method is uncertain in results but may sometimes be used with advantage. I remember one case where I planted a single piece of skin having an area of some 16 square inches. The graft was obtained in retrenching the scrotum of man for varicocele and was planted on a woman who had been operated on some days previously for cancer.

In addition to the recognized methods of skin grafting just described, occasionally reference will be found to grafting wounds with the skin of an egg, with the pellicle of a blister, and with dry epdermal scales, such as scrapings from callosities or dandruff from the head. I have tried all these expedients with unsatisfactory results. The only reasonable sources from which to obtain vital epithelial tissues are, the skin of the patient, autographs; the skin of another individual, heterographs, and the skin of a lower animal, zoographs.

Autographs are usually cut from the patient's thigh or shoulder. They furnish the material most likely to prove successful and should be employed except in cases where the patient's general condition is bad or where the area to be grafted is very extensive. The practice, however, is not free from annoyance or distressing complications. A woma came to me not long ago with an epi theliema of long standing on the verte of her head. It orginated in an ol scar and was about four inches in diam eter. I shaved her head, made an incis ion around the growth, and scalped her The wound was treated with a mois antiseptic dressing until it had fille with healthy granulations to the leve of the margins. I then skin grafte the bare surface by Thiersch's method cutting the grafts from the deltoi region. The grafts took beautifully and in two weeks she was apparently well. Several months later she cam back to the hospital. Her head looke like a tonsured monk and the skin o the bald area was perfect but the shoul der from which the grafts had been cu gave her much pain. On examinatio it was found to be the seat of a keloi growth, the size of a man's hand. I had cured her of a cancer only to give her keloids.

Heterographs are obtained from another individual, from amputated extremeties or from fresh cadavers. They usually grow well and should be employed when they can be secured from a satisfactory source. They entail the danger of infecting the patient with syphilis, tuberculosis, and other diseases, which must be carefully guarded against. The question of the necessity of the grafts being the same color as the skin of the patient on which they are planted is still unsettled. It is claimed that a negro skin grafted on a white person will lose its pigment, and that white skin grafted on a negro will become pigmented. A few years ago I had an opportunity to test the question. A negro man as black as the ace of spades had his leg crushed. It was amputated but the flaps sloughed, leaving

granulating area three or four inches n diameter. It was determined to skin graft it, and my assistants were directed o prepare the man for the operation at he next clinic. When the patient was brought into the amphitheatre I had ust finished amputating the leg of a white man. On the spur of the moment I decided to cut the grafts from he white leg and plant them on the lack one. The operation was done by Thiersch's method with satisfactory esults, the patient being discharged as ured in three weeks' time. Two years fterwards the man came back to the linic on accoun of some other trouble. An examination of the grafted stump howed that the grafts were as white as ney were on the day they were planted. While one case proves little, the result significant. It has, for obvious reaons, deterred me from reversing the xperiment and grafting a negro's skin n a white patient.

Zoographs are obtained from one of he lower animals, the frog, chicken, g, cat, dog, rabbit or guinea pig eing most commonly used. They do ot grow as readily as grafts from the kin of a human being, and they should ot be employed when other sources of pply are available. Still there are rtain conditions where they are not nly useful but are the only means by hich a patient can be cured.

A small negro child was brought to e clinic last winter, who had been adly scalded several months before. ome healing had occurred at the marns of the burns, but effort at repair d ceased and there was a granulating rface on the body covering an area over one hunderd square inches. The ild was treated until the granulations ere healthy and then came the quesn of where to get the skin with which to graft it. The child was too small, and its condition too feeble to furnish the grafts from its own person. The mother, relations and friends all declined to make the necessary sacrifice. No jail bird would volunteer as a victim, even at the promise of liberty, and applications to all the hospitals in the city seemed to show that for the time at least, surgeons had stopped amputating limbs. As a last resort, recourse was made to zoographs. A healthy six week pig, of chocolate color was purchased. It was carefully shaved and given frequent scrubbings and antiseptic baths. The day before the operation the belly was prepared as if for abdominal section. The grafting was done before the class of the University of Medicine. The pig was brought in on one table, the pickaninny on another. Grafts were cutfrom the belly of the pig and planted on the back of the child. The usual dressings were applied and for two weeks everything went well, and it was thought the operation had been completely successful. The wound itched, however, and one night the child got its hands beneath the dressing and scratched off a large portion of the new and tender skin. While the result was a partial failure, enough grafts remained to demonstrate the fact that pig skin would grow. More recently I have had other cases that were perfectly cured by this method.

Dr. William Flegenheimer, a graduate of the Medical College of Virginia, and formerly Resident Physician to the City Hospital, reports in *The Virginia Medical Semi-Monthly,* (issue of June 26th, 1903), a case of successful pig skin grafting in which extensive defect in the cutaneous surface of a man was restored by grafting the en-

tire thickness of the pig skin. He states that "At the present time the wound is completely healed, and strange as it may appear, it has a nice growth of fine hair upon it." This is the only case to my knowledge where pig skin grafting has been done by Wolfe's method, and it will be interesting to watch the development. In grafting by Reverdini's or Thiersch's method the hair follicles are, of course, not transplanted.

Dr. J. Hamilton Browning, of the University of Virginia, in a personal letter, dated February 5th, 1903, has reported another interesting and successful case of pig skin grafting. The case was one of railway injury of the thigh, resulting in the loss of 225 square inches of cutaneous surface. The grafting was done in three stages, with a week's interval between each, one-third of the wound being covered at a time. During healing, there was infection of the wound with the bacillus pyocyaneous, causing so much exfoliation that it was feared the operation had proved a failure. The surface remained covered, however, with a thin white film that looked like coagulated albumen, and microscopic examination of this film proved it to be epithelial tissue. The wound ultimaltely completely healed and the result was all that could be desired. Dr. Browning concludes his letter as follows: "I had pig prepared just like I do a patient for an abdominal operation. I always selected a sow pig, as they are easier to keep clean." Whether the last statement is based on fact or on prejudice, I leave my country friends to discuss.

When doctors disagree, they call each other quacks, and often they are right.

Some Mistakes of a Country Doctor

By One of Them.—Second Paper.

As physicians our mistakes (for I believe none of us are free from them) arise from various causes. It is no crime to plead ignorance in medicine. The field is too wide for one man to claim a knowledge of "all the ills that flesh is heir to," and ignorance is often excusable, but errors arising from this cause should be a stimulus to greater effort for better preparation.

Inattention, faulty examination, oversight, neglect, being too hurried, are all sources of our failure to make a correct diagnosis and apply the proper remedies. A preconceived idea of the trouble either from our former knowledge of the patient or from suggestions offered by others, give rise to many errors.

Our mistakes are fraught with consequences varying from slight discomfort to the patient or friends, to great pain and suffering, long invalidism, and sometimes to putting the patients across the stygian ferry. To the doctor, there comes loss of influence, loss of practice, discredit, abuse, and feelings ranging from annoyance to remorse.

But I did not set out to write an article on mistakes from abstract principles, but to give a few of my own, from my practice, for I have met with my share, and possibly from all the various sources. In some, the victims are hid from sight in the grave, while others walk the earth showing in divers forms and divers phases, my ignorance, negligence or carelessness. I am sorry for all of them, and never made one that I did not try to profit by it.

The next case reported is one of faulty examination.

E. G., colored, age 63. To this case

I was called in the night and obtained the following history from members of the family: General health good for a man of his age, was at work during the day, eat a usual supper, engaged in conversation with family for an hour or more, exhibiting nothing unusual, made preparations to retire some earlier than was usual, and before the other members of the family. When partially undressed, his attention was called to a package of patent medicine which had been thrown in the yard during the afternoon. Being unable to read himself, called upon his grandson to tell him what it was. After hearing some directions for its use, he opened the package, tasted the contents, a brownish powder, smelled it, snuffed a small quantity up his nose, remarked on its strength, cautioned the family not to use it, as it might be poison, sneezed, and retired to an adjoining room, having removed his shoes and coat. He was heard to sneeze after reaching his room. Two hours later he was found lying across the bed dressed as he left the living room, and as the family expressed it, "breathing hard." Being unable to arouse him, he was undressed and put to bed, and in the absence of his regular medical attendant, I was asked to see him. Found him lying on left side, breathing somewhat difficult, respirations 13 or 14 per minute, pulse 58, pupils responding to light, aroused with difficulty. Would not protrude tongue, said he was in no pain, but that medicine gave him a queer feeling in his head. Closer questioning found that his bowels had not been moved that day, and that his urine had probably been scant for several days. Examination of lungs was negative, heart action labored, but no murmurs detected. Firm pressure over kidneys caused him to flinch.

I examined the powder (I think it was largely powdered senna) and could see no reason why it should produce this effect upon him, and diagnosed his case as one of coma from constipation, and suppression of urine, probably uremic. I prescribed a purgative and a diruetic. Saw him the next morning and learned that he had passed urine and feces in the bed, and there was no material change. I was informed that the family physician was expected, and as his bed had not been changed, I did not examine him on this occasion.

Later in the day I met his physician and learned that my patient was hemiplegic. This was ascertained by the family in dressing him before the visit of his physician.

It is needless to say that my reputation as a diagnostician was nil in that family and neighborhood.

Mr. K., white, aged 38, I had known for several years. He was of a nervous temperament, and rather eccentric. I was called while on a visit of a week in his neighborhood, and in the absence of his family physician I found him delirious, in a wild, ungovernable excitement, face flushed, refusing food, etc. Duration of present illness dated from the previous afternoon, and onset was without premonitary symptoms, but occurred while at work on his farm. He passed a sleepless night, being up most of the time, going about the house and barn, over the yard, and grew violent towards morning. I unhesitatingly pronounced it acute mania, and prescribed bromides and opium.

He was seen later in the day by his regular physician, who diagnosed it malaria, and gave him a brisk mercurial

cathartic, followed by quinine and in twenty-four hours the patient was convalescent.

This error was made from my knowledge of the man's temperament, without as close an examination of his condition as I ought to have given him. I had previous to this thought he would eventually become insane, which prognosis was verified five years later, when he was committed to an asylum for the insane, where he finally died.

The errors in diagnosis of the next two cases would be unpardonable at present, but they were both made in my younger days and before appendicitis had been studied as thoroughly as at present. When the mistakes were made almost nothing was known of the disease, and being before the days of antisepsis and abdominal surgery, the results would have been the same in all probability, had a correct diagnosis been made.

W. M., colored, laborer, age 58, in eating an over-ripe melon, became sick and vomited. This was followed by severe pain in bowels, especially on right side, slight diarrhoae, with tenesmus for the first day, afterwards constipation. I was called to see him the third day, and after trying in vain for twenty-four hours to move bowels, decided that I was dealing with a case of invagination. Violent peritonitis followed on the fourth day, resulting in death in a short while. Autopsy revealed a perforation at the seat of the appendix. The condition of the appendix was not specially noted at the time.

The next case of this kind was a man of 30 years of age, robust and of fine physique. He was exposed for several hours traveling by wagon to intense cold, arriving at home thoroughly chilled. After several hours of unsuccessful efforts to secure reaction, I was called. He was complaining of severe pain in right inquinal region that would now put me immediately on my guard but was not then recognized, and severe rigors. Stimulants and hypodermatics of morphine gave him a fair night's rest, but not entire relief. Bowels continued painful and tender, but no swelling. I diagnosed it a case of congestion. Peritonitis supervened the third day, and he died on the 5th day of his illness.

Mrs. H., 42 years old, mother of six children, the youngest 8 years old, has been almost an invalid for ten years. I treated her for endometritis for some months with only partial relief. Saw her at the home of a relative, when she consulted me, and during the examination expressed the belief that she was four month's *enciente*. This I doubted though there was no opportunity then for verifying her belief. I knew her to be of a nervous temperament, and inclined to hysteria; I knew also that both she and her husband desired another child, and I thought the wish had become morbid, and coupled with her hysteria had produced the belief, or assertion of pregnancy. I told her this, laughed at her opinions and dismissed her with the promise of delivering her to the best of my ability without fee.

Two months later I was called to see her ostensibly for some fancied ailment, but in reality, that she might show me her pregnant condition. She gave a history of one or two very slight shows at catamerical periods, and none at all for four months; asserted that she felt distinct movements of foetus; that the enlargement of abdomen had been progressive, and for the past month very rapid. Her husband claimed to

feel movements in placing his hand on he abdomen, but asserted that often here was little or no enlargement. My examination showed an enlarged abdomen, but not sufficient for a multipara at six months, and there was some movements, very faint. I could not feel he foetus by ballotment, nor was the hape of the enlargement satisfactory. declined to commit myself as to her ondition. A few days later I saw her gain. The abdomen was much enarged, the shape and size not inconistent with pregnancy of six and a alf months, and I reluctantly consentd to a diagnosis of pregnancy.

Just two weeks before her expected onfinement, the meeting of my State Medical Society convened, and I was reparing to attend. Two hours beore I was to start, she learned of it, ecame nervous over my proposed abence and my promise of delivery, and s her regular medical attendant, havng been the family physician for some me. All these brought on what she ought was labor, and I was sumoned. She had prepared infant's lothing, all the neighbors were on *uie vie*, the bed was prepared, the urse was present, and on my entrance was informed that labor was proressing rapidly, pains every five mintes and increasing in severity, etc. I gretted to give up my trip, but saw o hope for doing otherwise, but deded to make a preliminary examinaon, which showed an elongated neck, contracted os, and abdomen as flat as pan-cake. I told her she was having ld-fashioned bellyache from over eatng, advised a dose of oil, and hurried o catch my train. I never heard anyhing more of an expected baby there, hough I was the family physician for veral years.

Another mistake, almost inexcusable in obstetrical work, but of different character, is the following:

Miss X. was a young lady of twenty years of age, beautiful, accomplished, cultured, a member of the best society, in which she was an acknowledged leader, a visitor from a city to the section of my practice. When I saw her first she had been confined to her room for two weeks, with no medical attention. Most of the history was obtained from her mother. The girl had been in a boarding school or college for some time, and had worked very hard, becoming considerably run down in general health. A round of parties, picnics and entertainments for several weeks followed. Then there was loss of appetite, general malaise, backache, etc., urine passed frequently, and often of high color. Her family physician had given prescription for kidneys and advised change of scene and rest. Soon after coming to the country, had noticed swelling of feet and ankles and some enlargement of bowels. Mother says she has been troubled for some time with albuminuria; did not examine abdomen, but took specimen of urine with me for examination, and found it loaded with albumen, for which I prescribed. Three nights later was called hurriedly and delivered the patient of a six months' foetus.

This mistake should not have been made. The known character of the patient and family, which up to that time was unblemished, the former and present albuminuria, the fullness of the mother's description of the daughter's troubles, and her evident wish to be frank and candid with me, threw me off guard and I did not one time suspect pregnancy. A palpation of the abdomen would, in all probability, have en-

abled me to make a correct diagnosis, but I did not make it.

In justice to both the mother and myself, I will say that she did not know her daughter's condition until labor set in. The mother had not seen her daughter for a month previous to the day of my first visit.

We wish to solicit from our readers, reports of unusual or interesting cases, too brief perhaps, for a completely written paper, but suitable for recording under "Clinical Notes." Many matters of value to the profession can thus easily be recorded which otherwise will be neglected and never become available for further reference. We wish our pages to be utilized for whatever will be of benefit to the profession.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

REVIEW OF MEDICAL AND SURGICAL PROGRESS.

Symposium on Meningitis.—The section on pediatrics of the Medical Society of the County of King's, engaged in a very full discussion of meningitis in a series of papers presented by several members. Dr. Frank Little, in considering the history of this affection, also takes occasion to say by way of definition that when using the term meningitis, unless modified, we mean cerebral or leptomeningitis, which is an inflammation of the inner membrane of the brain; similarly when applied to the spinal cord, we use the term spinal or rachidian meningitis.

Either cerebral or spinal form may be traumatic, likewise pachy-meningitis, which is the dural type; meningitis occurs as a primary disease, but is more frequently either secondary or sequel to some other disease.

Collins, in Twentieth Century Practice, divides leptomeningitis into (1) true, or genuine meningitis; (2) false or pseudo-meningitis. The present tendency is to classify according to its bacterial origin, but this is not justified as yet by our knowledge of the subject. Collins classifies leptomeningitis as (1) lepto-meningitis; (2) cerebro-spinal or specific meningitis; (3) tubercular meningitis. These forms originate in the same tissues and produce serous, sero-fibrinous, sero-purulent, sanio-purulent and purulent effusions. False meningitis is only a dropsical condition of the meninges and occurs (1) in drunkards and is known as "wet brain;" (2) serous meningitis of infants and cachectic adults due to malnutrition or exhausting disease. Lepto-meningitis may become chronic and then always secondary to an acute attack. Cerebrospinal fever, or spotted fever, or typhoid meningitis are synonyms applied to epidemic cerebro-spinal meningitis. It is only since 1883 that the bacillary etiology was set forth by Leyden, who demonstrated the diplococcus in the cerebro-spinal fluid, which diplococcus was shown by Fraenkel and Hauser to be identical with the pneumococcus.

In 1887, Weichselbaum found the diplococcus in meningeal exudate; later other investigators discovered a third and fourth form of bacteria, and that these same organisms were causative factors in other diseases, as pneumo-

ia and rhemumatism. It remains for he bacteriologist and pathologist to liscover the specific germ of meningitis, f there be such.

Differential Diagnosis of Meningitis n Children.—(By Dr. L. C. Ager.)—Ager says the difficulties in diagnosis ary with individual cases; cases occur econdary to acute infectious diseases r to otitis media, which are readily iagnosed by the severe headache, the harp cry, strabismus, temperature, ulse, etc., but that even here one must e on his guard lest these symptoms rove to arise from toxaemia of acute nfectious diseases, as pneumonia; at ther times the symptoms are only hose which arise from a transcient oxic meningeal irritation and congeson. In considering the diagnosis of neningitis, we must have in mind the ymptoms of the diseases which closely esemble it. These are (1) diseases of ne stomach, which should not present ny great difficulty as the confusing ymptoms clear up quickly; (2) acute alaria, which at first onset may be istaken for almost anything; take the mperature every 2 hours; a remission uring the 4 hours is favorable to maria, but you may get it in meningitis; e must rely on examination of the lood for the parasite, and this should e done before the administration of uinine; (3) poliomyelitis, this general gives the reflex symptoms of stomch, intestines and bladder from the irtation of meninges of the cord, beides there are no direct cerebral signs, headache and photophobia, and the ver is mild; while the rapid developent of local paralyses clears up the se as being poliomyelitis; (4) rheuatism; (5) syphilis, should give no ouble, although we may have cereral irritation and meningitis from their organisms; (6) nephritis should give no confusion, as the odema and urinalysis should be decisive; (7) pneumonia being freqnently very obscure in children and the appearance of cerebral toxaemia is often marked and the lung signs being masked, we may be compelled to defer diagnosis. The author cites a case of a 9-year-old boy, whom he was called to see during the night, with convulsions and history of having fallen on the ice a few days before; he was unconscious, eyes fixed, pupils contracted, no response to light, unilaterial convulsions and moaning cry; was sent to hospital with diagnosis of traumatic meningitis; a few days later learned had proven to be pneumonia, which was followed quickly by scarlet fever. May get the embarrassed respiration in pneumonia before lung signs are clear; if the effusion is not purulent, you do not get leucocytosis in meningitis as you do in pneumonia. (8) Typhoid fever is more common in children than we often suspect, and is difficult to differentiate from meningitis, and we must rely on the Widal test, leucocyte count and lumbar puncture. Lumbar puncture is valuable not only in diagnosing meningitis from other diseases, but also in telling between tubercular form and the others. The spinal fluid after puncture is collected in a sterile test tube and allowed to stand from two to six hours until a strand of fibrin collects at the bottom; this is taken out on a sterile platiuum needle, dried by gentle heat, fixed in flame and stained. In almost every case of tubercular meningitis the bacilli will be found; if not a differential count of the leucocytes in the smear will show from 65 to 95 per cent. of lymphocytes, which means tubercular meningitis.

Symptomatology of Leptomeningi-

tis.—Those symptoms common to all forms of the disease and upon which diagnosis is based, are sudden and apparently causeless vomiting, persistent headache with delirium, elevation of temperature, constipation, affections of the cranial nerves, causing photophobia, strabismus, inequality of pupils, ptosis, nystagmus, deafness, aphasia, retraction of head, convulsions, general and local paralyses, disturbances of cardiac, respiratory and vasomotor systems, all being modified in degree and order of appearance by location of lesion, whether in meninges of the convexity, base, ventricles or cord. In meningitis of the convexity, headache and is more marked with local convulsions and hemopligia, while vomiting, affections of the cranial nerves are less and optic neuritis is rarely present. In meningitis of base, to which children are most liable, vomiting is more marked, cranial nerves are involved, optic neuritis appears early, while delirium, neuriplegia and convulsions appear later. In ventricular form, bulging and pulsating of anterior fontanelle is a striking feature with involvement of cranial nerves. In meningitis of cord we get in addition pain and rigidity of muscles, paraplegia and loss of knee-jerk.

The most common form of meningitis is the tubercular and occurs in children from 2 to 10 years of age; there is a prodromal stage of from a few days to 2 or 3 weeks, in which child is listless, irritable, restless at night and some temperature, with or without headache, which in older children is increased by mental effort; later vomiting arises along with delirium, photophobia, drowsiness or convulsions, elevation of temperature and increased pulse rate, and followed in a few days by rigidity of neck, retraction of head, strabismus, ptosis, inequality of pupils, optic neuritis and deafness, and there may be hyperaesthesia or anaesthesia and vasomotor disturbances as shown by Trousseau's tache cerebrale, along with constipation and retraction of abdomen. Respiration is rapid at onset, but later slow, intermittent and irregular, likewise with the pulse. A continued shov pulse with irregular breathing, is a strong indication of tubercular meningitis. Usually about the third week o sooner, the child passes into stupor an coma and has involuntary discharge o urine and feces, Cheyne-Stokes respiration and death follows shortly.

Prognosis and Treatment of Meningitis.—(By John R. Stivers, M. D.)—Dr. Stivers thinks an accurate prognosis is dependent on an accurate diagnosis and that an accurate diagnosis is often very difficult. Many cases of recovery are cases of false diagnosis. In acute meningitis there are recoveries and authorities differ as to its mortality rate. Tubercular meningitis is almost always fatal if not directly from the brain lesion, yet fatal sooner or later from tubercular process in other organs. Those rare cases of this type which recover show as a rule imbecility, deafness or paralysis. Mortality in epidemic form is from 30 to 75 per cent. When patient does not notice light and noise; with dilated pupils; skin is pale and sweaty; involuntary discharges; local or general paralysis, coma or semi-coma, then there is no hope of recovery. Duration of fatal is less than a week; of those that recover, two or more weeks. Treatment has two objects. 1. To make patient comfortable. 2. To limit the inflammation process. Room should be dark and free from noise; chloral and bromides in doses larger than used in

ther diseases are used to keep the ner-ous symptom in check; if these fail, ely on morphine in judicious hypodem-nic doses; chloroform to help control convulsions and will often give quiet leep. Aconite reduces cerebral conges-ion in small oft repeated doses, but hould not be used too vigorously on ccount of the circulatory depression. Calomel should be given as purge at be-inning and at times during course of he disease; do not use ergot; blisters re used by the Germans; potassium odine and mercury by inunction may be f value in the syphilitic form. Ice aps to shaved head are good; lumbar uncture relieves pressure on meninges nd helps in diagnosis and should be ade early, and may be repeated sev-ral times. The above treatment, as utlined, applies to the non-tubercular ypes.

Tubercular Meningitis.—(By Robt. . Wheeler, M. D.)—Wheeler thinks it oubtful if tubercular meningitis ever ccurs as a primary disease, and that it ccurs along with pulmonary tubercu-r involvement, and that the extension o the brain occurs through the tracho-ronchial lymphatic glands, with the lood or lymph as the carrying me-ium. Not likely that a child will get it y drinking tuberculous milk, for we now that primary intestinal tuberculo-s is of very rare occurrence.

The disease is usually found at the ge of 3 to 6 years; Liverpool Infirma-y records shows not a single death in ild under one year old in seventeen ears. May occur in children who have o tubercular taint; here there is usu-lly a source from which was con-acted. Anatomical lesions are those rising from growth of miliary tuber-les in the pia mater, with consequent flammation and lymph and pus for-mation and serous effusion in the la-teral ventricles. Amount of fluid in ventricles varies from 1 to 4 ounces, and often leads to flattening on convo-lutions by pressure against the cranial wall. Symptoms in young child occur rapidly; in older children less quickly; they are high temperature, convulsions, respirations 30 to 50; pulse 130 to 150; clonic spasm and strabismus and paral-ysis; generally constipation; vomiting may occur; bulging of frontanelles also, and we can only decide between serous or septic forms and tubercular form by lumbar puncture and getting bacilli of tuberculosis microscopically. Convul-sions are not so violent in tubercular form and very high temperature points to tubercular lesion elsewhere. Kernig's sign—stiffening of the legs when sitting child on edge of table—is usually pres-ent, as is also rigidity of neck muscles and head retraction, though either may be absent. Pulse is fast at first; slow and irregular later and finally rapid and weak; breathing Cheyne-Stokes. Diag-nostic differentiation is made by mi-croscope, the bacilli having been found in the meningeal serum in 21 out of 30 specimens; two being puenmonic in or-igin; 1 serous; 1 normal fluid; 1 brain tumor; 3 being probably septic. Lum-bar puncture by relieving pressure pro-duces some comfort and settles the fatal prognosis. Treatment is of little avail; should look to prophylaxis; watch known scrofulous children; avoid prolonged exposure to hot sun-rays; avoid tea, coffee, alcohol and over men-tal exertion. Treat nasal catarrhs, ec-zemas and enlarged lymph nodes and give cod liver oil and out-door exer-cise.—*Brooklyn Medical Journal.*

Epileysy.—In a paper read at the June meeting of the Northwest Medi-

cal Society, Dr. L. C. Peter, of Philadelphia, stated that there are two facts which need to be thoroughly understood in order to meet with success in the treatment of epilepsy, namely: first, that epilepsy, which has its inception in childhood, is largely a disease that can be prevented; and, second, that changes in the patient, both physical and mental, are the result of oft-repeated convulsions, hence treatment should remove the causes that lead to the earlier convulsions, and prevent succeeding attacks after the epileptic habit has been formed.

Much can be done for these patients by a painstaking regulation of habits and diet, each patient requiring careful study—no hard or fast rule can be laid down as applicable to every case, but, generally speaking, any digestible and easy assimilable food may be allowed if gastrointestinal disturbances does not follow its use. A deranged stomach or an intestinal fermentation may precipitate a convulsion, hence, the treatment of the digestive tract is essential to the treatment of epilepsy. Since every convulsion renders the patient more susceptible to others, the early removal of the cause is essential to success in treatment. Look carefully after reflex causes, such as astigmatism, ocular muscular errors, constipation, seat worms, indigestion, adherent foreskin, etc. After the convulsion habit has been formed, drugs which act as sedatives to the cortical cells are a necessary adjunct to the treatment. The bromides hold the first place. Salanum has been used by the author and is preferred by him in the mild cases to the bromides.

The Use of Acid Phosphate of Sodium in Alkalinity of the Urine.—(*Medical Record.*)—In the *British Medical Journal,* Dr. Robert Hutchinson give the result of his studies of the effect of various drugs on the reaction of th urine. In trying to find agents bes calculated to increase the acidity of th urine, he first made a series of observa tion on the percentage of acid in an in dividual on a fairly fixed diet and the administered agents such as hydrochlo ric, sulphuric acids (the effect of thes in safe doses was slight); next, organi acids, tartaric, acetic, lactic and citri (tendency slight, but greater than th mineral acids); next, benzoic and bori acids were found to have no alkalin izing power; next were tried the aci salts, and of these the acid phosphat of sodium exerted greatest effect i making urine alkaline; not all of thi salt is secreted in the acid phosphat form, part being neutralized in the body and increasing the ammonia outpu from the body. Dr. Hutchinson has used this salt in cases of cystitis and other diseases with alkalinic urine during the past two years, and found very effective in doses of 30 to 60 grains every three hours where good effect is desired; smaller doses more frequently administered have better effect in securing continuous elimination.

Management of Catarrhal Pneumonia in Infants and Young Children.—(By C. G. Kerley, in *Medical Record.*)—Dr. Kirley says catarrhal pneumonia is secondary to neglected bronchitis in great majority of cases and occurred with greatest mortality as complication of measles or diphtheria. Since catarrhal pneumonia does not mean a definite and limited course, as does lobor form, and since the cases are often protracted, it is very necessary to save the child's strength; much strength in sick children is wasted by over-nurs-

ing, bathing, too frequent giving of medicine and allowing child to go too long without sleep. Make child comfortable; give plenty of fresh air in room without direct current on patient; but by all means, allow the fresh air in abundance; room temperature should never go above 70 degrees F.; children are often overclothed in winter and especially so when ill of pneumonia. Kerley said he had discarded the oil jacket and uses mustard or turpentine applications instead. All children should be placed in a roomy crib; food supply should be less than in health because digestive capacity is less; nursing hours should be the same, but duration of nursing should be shortened. Food, medicine and local applications should be made at the same hour during night, so as not to break child's rest too often. Steam inhalations of creosote are very valuable; so much so that Dr. Holt has in the Babies Hospital a special room constructed in which children ill of pneumonia take these inhalations. Ten drops of creosote are added to one quart of water in a croup kettle and heated and vapor conducted into crib which has been enveloped with sheets so as to make fairly tight; every ten minutes sheets should be parted and fresh air allowed to enter; thirty minutes of inhalation should be allowed every 3 to 4 hours. Expectorants should be used cautiously and only in early stage and not sufficient to injure the stomach. Ammonia salts are bad for stomach and the muriate should be given in not more than ½ gr. doses. In cases where bathing did not control temperature or could not be given intelligently, best give at 4 to 6 hour intervals 1-5 grain caffein, ½ grain phenacetin and ½ grain Dover's powder. Heart stimulants were often begun too early and are indicated by pulse of 150 in case not strengthened by packs or sponging. Strychnine should be given until get the desired effect on heart; but do not begin too early. In very fast heart one drop of strophauthus tincture could be given every three hours, and is better than digitalis in action on circulation and is better borne by stomach. Nitroglycerine is indicated in cyanosis; brandy not as good as other stimulants, as it is trying on digestion. For sponging, best use when temperature goes to 104 deg. or over, one teaspoonful of salt to one quart of water or one part of alcohol to 4 parts of water, child being sponged under blanket and kept up for ten minutes and followed by brisk rubbing with hand; if this fail, resort to pack thus: one large bath towel, armholes cut in them so towel extends from neck to knees; place hot water bag to feet; moisten towels with warm water at first so as not to frighten child and then bring down to 85 or 80 degrees and let child remain in this for one-half hour, being turned from side to side. Take rectal temperature, and if no reduction, bring down to 60 or 65 degreees. Pack may be used this way and child sleep; keep temperature 102.5 and 103.5 degrees. Older children often ask for pack.

In discussion of the dangers of ad interim operations in appendicitis at the 54th meeting of the American Medical Association, and published in the *Journal of the American Medical Association,* the following conclusions were stated by Dr. A. J. Ochsner and we would call attention to his points on treatment:

1. The mortality in appendicitis results from the extension of infection from the appendix to the peritoneum or

from metastatic infection from the same source.

2. This extension can be prevented by removing the appendix while the infectious material is still confined to this organ.

3. The distribution or extension of the infection is accomplished by the peristaltic action of the small intestines.

4. It is also accomplished by operation after the infectious material has extended beyond the appendix and before it has become circumscribed.

5. Peristalsis of the small intestine can be inhibited by prohibiting the use of every form of nourishment and cathartics by mouth and by employing gastric lavage in order to remove any substances of food or mucus from the stomach.

6. The patient can safely be nourished during the necessary period of time by means of nutriment enemata. Large enemata should never be given, for they may cause the rupture of an abscess into the peritoneal cavity.

7. In case neither food nor cathartics are given from the beginning of the attack of acute appendicitis and gastric lavage is employed, the mortality is reduced to an extremely low percentage.

8. In cases which have received some form of food and cathartics during the early portion of the attack and are consequently suffering from a beginning diffuse peritonitis when they come under treatment, the mortality will still be less than 4 per cent., if peristalsis is inhibited by the use of gastric lavage and the absolute prohibition of all forms of nourishment and cathartics by mouth.

9. In this manner very dangerous cases of acute appendicitis may be changed into relatively harmless cases of chronic appendicitis.

10. In my personal experience no case of acute appendicitis has died in which absolutely no food of any kind and no cathartics were given by mouth from the beginning of the attack.

11. The mortality following operations for chronic appendicitis is exceedingly low.

12. Were peristalsis inhibited in every case of acute appendicitis by the methods described above, absolute prohibition of food and cathartics by mouth and use of gastric lavage, appendectomy during any portion of the attack could be accomplished with much greater ease to the operator and correspondingly greater safety to the patient.

I would make the following suggestions for the treatment of appendicitis with a view of reducing the mortality:

1. Patients suffering from chronic recurrent appendicitis should be operated on during the interval.

2. Patients suffering from acute appendicitis should be operated on as soon as the diagnosis is made, provided they come under treatment while the infectious material is still confined to the appendix, if a competent surgeon is available.

3. Aside from insuring a low mortality this will prevent all serious complications.

4. In all cases of acute appendicitis without regard to the treatment contemplated the administration of food and cathartics by mouth should be absolutely prohibited and large enemata should never be given.

5. In cases of nausea or vomiting or gaseous distention of the abdomen, gastric lavage should be employed.

6. In cases coming under treatment after the infection has extended beyond the tissues of the appendix, especially in the presence of beginning diffuse peritonitis, conclusions four and five should always be employed until the patient's condition makes operative interference safe.

7. In case no operation is performed neither nourishment nor cathartics should be given by mouth until the patient has been free from pain and otherwise normal for at least four days.

8. During the beginning of this treatment not even water should be given by mouth, the thirst quenched by rinsing the mouth with cold water and by use of small enemata. Later small sips of very hot water frequently repeated may be given and still later small sips of cold water. There is danger in giving water too freely, and there is great danger in the use of large enemata.

9. All practitioners of medicine and surgery, as well as the general public, should be impressed with the importance of prohibiting the use of cathartics and food by mouth, as well as the use of large enemata, in cases suffering from acute appendicitis.

10. It should be constantly borne in mind that even the slighest amount of liquid food of any kind given by mouth may give rise to dangerous peritalsis.

11. The most convenient form of rectal feeding consists in the use of one ounce of one of the various concentrated liquid predigested foods in the market, dissolved in three ounces of warm normal salt solution introduced slowly through a soft catheter, inserted into the rectum a distance of two or three inches.

12. This form of treatment can not supplant the operative treatment of acute appendicitis, but it can and should be used to reduce the mortality by changing the class of cases in which the mortality is greatest into another class in which the mortality is very small after operation.

In regard to the first point, I wish to say here, as I have said everywhere before, so long as the infection is within the appendix when I make the diagnosis, I operate immediately if I can obtain the consent of the patient. I have stated the reasons why this should be done over and over again.

There is, however, a time that has been described by Dr. Niles, a time which comes to every surgeon, when we can not say with any degree of certainty that the particular patient under consideration will get well if we operate at once. This class of patients, under the best possible conditions, and with the best possible surgeons, will produce a mortality of from 15 to 30 per cent. if they are operated on at once as soon as the diagnosis has been made. I wish to say that with those cases we do not know what will happen if we operate at once. We do know, however, that in 97 per cent. of all such cases suffering from perforative or gangrenous appendicitis the patient will get well,' provided we follow out the plan outlined in the above conclusions, namely, that of washing out the stomach, and giving absolutely no cathartics and no food of any kind by mouth and giving no large enemata until the patient has been normal for at least four days. We have counted the leucocytes and have found in all cases in which this treatment was carried out that the abnormal leucocytosis has decreased. We have found that the pain and the tympanitis disappeared regularly and that the patient's condition has improved systematically, and that al-

though there is still a slight mortality, this has been diminished enormously by this form of treatment, not only in my own hands, but also in the hands of a large number of physicians and surgeons who have carefully carried out all of the details of this plan of treatment. Those who have failed have either permitted the use of a little food by mouth, or they have neglected to employ gastric lavage or they have given large enemata.

"The Causation of Cancer and Its Treatment Without Operation," is the title of a paper read by Robert Beel, M. D., of Glasgow, Scotland, before the fourteenth International Medical Congress, held in Madrid April 23-30, 1903. This paper is published in full in the *Medical Record* of August 15th.

The predisposing causes to cancer, given by Dr. Beel, are as follows:

1. Persistent and prolonged retention of faeces containing an under amount of decomposing albuminous material from which enterotoxines are derived, and by absorption conveyed to the blood.

2. The blood thus contaminated produces a depraved condition of the nervous apparatus, thereby handicapping the functional activity of the various organs, interfering with cell metabolism, and eventually culminating in anaemia in young persons, or cachexea in the elder.

3. If the functions of the thyroid gland are at fault, these toxines, which otherwise would be neutralized, remains in a position capable of producing serious mischief.

4. If saccharomycetes are present in the blood, this toxic material is liable to undergo chemical changes resulting in the formation of uric acid, whe uricacidaemia will result.

5. The presence of these toxines i the blood, alone or combined with uri acid, exerts a pernicious influence upo cellular structures, and confers upo them a predisposition to take on malignant metamorphosis.

6. Prolonged or repeated irritation o a part is liable to rouse into malignan activity cells which otherwise woul have remained dormant.

7. The vitiated condition of the bloo by prostrating the physiological vitalit of the various organs and cellular struc tures and paralysing the vis medicatri naturae affords every facility for th new growth to establish its identity and increase its area at the expense o of its envimonment.

High Enemata in the Treatment of Colitis. — Maurice De Langenhagen states in *La Presse Medicale* of May 13, 1903, that he has obtained the best results in colitis from the use of high enemata varying in temperature from 35 to 48 degrees C., administered slowly and under low pressure. At first he uses one liter of fluid, gradually increasing the quantity to one and three-quarters to two litres as toleration becomes established. Generally two consecutive enemata are given, the first to remove fecal matter, the second to wash away mucus and to act upon the walls of the intestine. Emollients, or antiseptic drugs, may be added to the second enema. Langenhagen concludes that statements to the effect that lavage produces dilitation and inflammation of the lower bowel have no foundation in fact, and that the allegation that it increases intestinal atony is true in only a very limited number of cases.

He says that pain and spasm of the intestine are produced only when the enema is given under too high pressure, and that very few patients exhibit any nervous intolerance to this method of treatment.

Medico-Legal.—Physician and Patient.—A movement is on foot in Massachusetts to secure legislation for the protection of the confidential relation between physician and patient, similar to that which now exists for the clergyman and parishioner and lawyer and client. The Massachusetts Medical Society holds that the cases are analogous, and that the physician is as much entitled to consideration as either the preacher or attorney. The law relieving the clergyman from the necessity of disclosing on the witness stand the confidential communications made to him as spiritual adviser is possibly an outgrowth of the idea of religious liberty. There being some churches that require confession of sins, it is obvious that the freedom of the individual to worship as he pleases would be hindered somewhat if he must always run the risk of having his private confessions made public; and while, of course, the government could not be expected to be moved by any consideration of the kind, if it imperiled the cause of justice, in the absence of any such peril it is natural and right that the individual be protected in his right to worship as he will. Similarly, the immunity given to lawyers would seem to be based on the old principle of law that a man is not required to incriminate himself. Men accused of crime often must confide in their attorneys facts which would operate against them if revealed on the witness stand. In Maryland other classes are privileged in this respect, as newspaper reporters, who are not required to reveal the sources of their information, and husbands and wives, who are not required to testify concerning communications made to each other during marriage. The underlying consideration in each case seems to be the protection of those confidential relations which are necessary to man in order that he may enjoy his inalienable rights of life, liberty and the pursuit of happiness. Of this there can be no doubt. "All that a man hath will he give for his life" may not be true in every case, but it is in ninety-nine out of a hundred, and for this reason the confidence given by patient to doctor, as a rule, is more unreserved even than that given by client to lawyer or layman to priest. Yet, on the witness stand, the doctor must reveal that which has been entrusted to him under pledge of strictest secrecy. The condition is an anomalous one, and unless it can be shown that the cause of justice would be hindered, the physician should be protected as are the lawyer and the clergyman.—*Baltimore News.*

Far-Reaching Influence of Proper Feeding in Typhoid Fever.—Readers of the *Therapeutic Gazette* are well aware of the fact that during the last five or six years we have frequently in our editorial columns insisted upon the need of supplying patients during an attack of typhod fever with other diet than one of pure milk, and that while on the one hand we have advocated a greater number of nutritious articles than are commonly given to such patients, on the other, we have not gone so far as to recommend a too liberal diet. It has been our experience that the administration of other soft and easily digested foods than milk carries the patient through

his illness and leaves him on the shores of convalescence less wasted than does a pure milk diet, and so we are particularly interested in the results of a most interesting research recently carried out in England and published in the *Lancet* of December 6, 1902, by Prof. Wright and Lieutenant Knapp, of the Army Medical School at Netley, upon the causation and treatment of thrombosis occurring in connection with typhoid fever. Many persons would suppose that it was a far cry from the diet in typhoid to the occurrence of venous thrombosis, yet these investigators have shown, on the contrary, that these two factors in the case are very intimately associated, for they have proved that one of the reasons why thrombosis is so frequently seen in typhoid fever depends upon the fact that the quantity of lime salts in the blood of typhoid convalescence is greatly in excess of that in normal blood, and that this results in increased coagulability during convalesence. They also believe that this excess of lime salts must be obtained from the milk, which constitutes in many instances an exclusive article of diet, and they point out that cow's milk is particularly rich in calcium oxide, it being present in cow's milk in the proportion of 1 to 600 as compared to 1 in 800 in lime water. They recommend, therefore, that where there is a tendency to thrombosis after an exclusive milk diet, partial decalification may be effected by adding to the cow's milk from 20 to 40 grains to the pint of the citrate of soda.

In conclusion it is interesting to note that they believe that this is one of the reasons why a milk diet is so beneficial in certain cases of albuminuria or "serous hemorrhage from the kidney," and explains the comparatively rarity of thrombosis after acute fevers such a Malta fever, in which disease a mil diet is insisted upon. Such researche as these are of great scientific interes and practical value, and we earnestl trust that Professor Wright, who ha already made such valuable contribu tions to the pathology of the blood an its bearing upon therapeutics, will fin opportunity for a continuation of hi useful investigations.—*Ther. Gazette.*

Illuminating Gas Poisoning.—P. M Pilcher (*Brooklyn Med. Jour.*, May 1903) reports and analyzes 25 cases o iluuminating gas poisoning. From hi investigations he concludes that th toxic effects of inhaling illuminating gas are due primarily to chemica changes produced in the constituent ele ments of the blood, this being a substitution of carbon monoxid hemoglobin for the oxyhemoglobin, so diminishing the supply of oxygen to the tissues. Further, that the direct cause of most of the symptoms is the diminished per cent of oxygen contained in the arterial blood supplying the central nervous system. If the above be true, it is a condition in which oxygen should be administered pure, in order to force it into simple solution in the blood and so reinforce the remaining oxyhemoglobin. For the purpose of supporting the circulation, diluting the poison, assisting its elimination, and its possible influences in breaking up the chemical combination of the CO with the hemoglobin, a copious infusion of salt solution should be administered. Such infusions should be reinforced in the more severe cases by a direct blood transfusion, whereby an increased supply of oxygen-carrying hemoglobin is obtained. To control the tendency to acute dilatation of the heart, a free use of cardiac

imulants should be early resorted to. dema of the lungs is the chief of the condary sources of danger and must e constantly watched for and every ossible measure taken to guard against —*Int. Med. Magazine.*

Pilocarpin in the Treatment of Pneu-onia.—E. Curtin (Lancet, May 16, 903) publishes the case histories of 7 atients suffering with pneumonia, in l of whom excellent results were ob-ined by the use of pilocarpin in 1-10 rain doses. This drug relieves pleuritic in and breathing within a few hous of s administration and also seems to asten resolution, probably by exciting andular secretion. Its administration in the majority of cases followed by a se of temperature of from half a de-ee to one and a half degrees. One-nth of a grain hypodermically does t cause profuse perspiration, but rely fails to reduce the temperature thin an hour or two. It also cleans e tongue and stimulates the flow of liva. The author never noticed its peated administration attended by y undesirable results. One precau-n is necessary, namely, to keep the tient warm.

Blood Cultures in Lobar Pneumonia. E. C. Rosenow (*Medicine,* June, 903) has endeavored to establish more ccurately the frequency and time of eneral pneumococcus invasion of the lood stream and the diagnostic and rognostic value of blood cultures in roupous pneumonia; also to study the gglutinating and bactericidal actions pneumococci blood serum. He con-ded from his investigations that with proved technic, using for inoculation rge quantities of blood, the pneumo-ccus can be re covered in all cases of pneumonia, and in obscure cases of pneumococcus infection blood cultures may be a diagnostic method of positive value. Penumococcemia in pneumonia does not mean a specially unfavorable prognosis. On account of the difficulties involved, agglutination of the penumococcus is, at present, of scientific rather than of practical value. Normal and pneumonic blood and serum appear to have no bactericidal influence on the pneumococcus. The interesting question whether lobar pneumonia is the primary result of a direct local infection of the lung, or of a secondary localization in the lung of pneumococci in the blood, is as yet hardly ripe for final discussion.

The Etiology of Acute Articular Rheumatism.—Many organisms, according to G. W. Webster (*Journal of the American Medical Association,* January 10, 1903), produce arthritis. Probably all cases of acute articular rheumatism are due to infection.

Probably all organisms known to cause either acute articular rheumatism or other forms of arthritis also give rise to other pathological conditions as well.

It would thus seem not merely a local infection or inflammation, but a general infection, the commonest seat of the principal lesion being the joints, but also involving the heart, both endocardium, pericardium, and muscle, occasionally the meninges and other structures, and caused by a diplococcus circulating freely in the blood. The diplococcus seems to be merely a germ capable of causing a wide-spread inflammation, and the joints are included in its sphere of action. Just as in pneumonia, we may have general infection with local manifestations or inflamma-

tory reaction in the meninges, the pleura, the endocardium, pericardium, post-nasal space, peritoneum, lympatics, and lungs ,the latter being probably the usual site of the localizing inflammation.

It is quite possible that there is some hereditary diathetic or constitutional peculiarity, the nature of which is completely unknown to us, which may favor infections in general, and possibly that of rheumatic infection in particular.

That there may be varying degrees of susceptibility depending on exhaustion, depressing influences, as cold and the like, seems reasonable. These are the occasions, not causes. They favor but do not cause.

That susceptibility varies greatly there can be no doubt. Whether this depends on alkali tension has not yet been demonstrated, but it seems plausible on the ground of variation in the bactericidal action of the blood. This may explain the value of alkalies in the treatment of rheumatic affections.

To Treat a Cold.—Dr. Charles H. Shepard, writing in the *Journal of the American Medical Association* on the subject of colds, makes the assertion that the practice of administering quinine to break up a cold is to be condemned, because it debilitates the nervous system and weakens the action of the heart. The same may be said of any alcoholic medicament, because the nervous system is first irritated and afterwards depressed by its use. To make a radical cure of a cold, let the patient abstain entirely from food for at least twenty-four hours; should the bowels be at all inactive it is desirable that they be thoroughly flushed with warm water. Drink freely of pure water, taking a brisk walk in the open air, an then a Turkish bath. This may be fol lowed by an oil rub, which mollifies th skin, making it more flexible and active —*Cleveland Jour. Med.*

Inspired Medical Articles—(Chicag Clinic.)—This matter of introducin medical articles with innocent appear ance, but with commercial motives, i becoming so general that we are in clined to look with suspicion on al articles mentioning articles of specia manufacture. This is wrong. Th medicinal products of the better class o pharmaceutical houses are exceedingl important in our therapy. To return t the old days of crude pharmacy, with out the elegant preparations of the pres ent day, would be a decided retrogres sion and one which would entail im mense loss to ourselves and to our pa tients. These excellent preparations however, should not be exploited unde cover. The man who believes or has been convinced as to the excellence of a preparation need not hesitate to so state, and there is no reason or excuse for his sneaking his opinions in like a thief in the night, sandwitched in between harmless-looking impersonal matter. One journal has announced that it will not accept articles specifying the names of particular pharmaceutical prepara tions. We are not so narrow, not so much afraid of senseless criticism, as to take any such position. We regard it as no more a sound position than to say that we would not mention the name of any individual physician in connection with a procedure or operation. When we mention the name of Murphy, for instance, in connection with the button which bears his name, we are indirectly exploiting the talented inventor of that device. So are we, also, when we men-

on the name of a particular manufacture. There need be no more suspicion of commercial motive in mentioning meritorious pharmaceutical preparations than in mentioning the names of physicians who have done things. The good pharmaceutical preparations may be commended in the medical press without apology, but they should be commended only as they do good to the profession, and not for the commercial benefit of their manufacturers.

A Substitute for the Iodides.—Physicians of experience know full well that in many instances where iodide of potassium is indicated they are prevented from administering it in adequate doses because the stomach or other portions of the body are unduly susceptible to its influences. This holds true not only in the treatment of certain forms of syphilis, but perhaps more frequently still when we desire to administer iodides for the cardiovascular changes with high arteral tension which are met with in persons of advancing years. Again and again have we seen gastric disturbances or coryza complicate the progress of these cases, when they were otherwise showing marked signs of improvement so far as the circulation and kidneys were concerned. Probably the iodine of sodium produces these objectionable effects less frequently than the iodide of potassium, and perhaps the iodide of strontium even less commonly than the iodide of sodium. Nevertheless, be the salt what what it may, contraindications to its use continually arise. In many of these cases the physician is exceedingly loth to stop the administration of the iodides, and the question therefore arises as to how he can continue an iodine influence without the gastric disorder which the iodides produce. For some reason which we cannot explain, but which is neverthless a fact, the syrup of hydrodic acid can frequently be taken by these patients, when the iodide of potassium and the iodide of sodium are badly borne, in doses varying from 20 to 40, or even 60, minims, provided the drug is taken about an hour after meals. If any evidences of gastric disturbance are present they may be arrested in some cases by the patient partaking of Vichy water, or ordinary water to which has been added a small quantity of bicarbonate of sodium. We are quite well aware of the fact that hydriodic acid is by no means a new remedy, and that it has been widely tried by many practioners. We also know that some patients cannot take it at all. But practical experience has taught us to bear it in mind as a valuable drug in the treatment of the conditions which we have mentioned.

NEWER MATERIA MEDICA.

Cough in Pulmonary Phthisis.—(By J. Leffingwell Hatch, B. Sc., M. D., F. R. M. S., London.)—As broods silence back of sound, so also stands designer back of design, and the logical mind of man has ever thus traced presumptive relation between the thing observed and its supposed origin, and called them respectively cause and effect.

Thus in medicine we look from symptoms to cause, and if post mortem we find a definite lesion we too often

jump to the conclusion that it must be the very thing we are looking for, and are apt to forget that back of this change of structure lingers the first real cause in preverted physiologic function.

One of the best known and oldest symptoms, and one which occurs from diverse causes, is cough, and this, with another, almost as common and well known, dyspnea, go hand in hand among the various affections of the respiratory organs.

In pulmonary phthisis cough is usually the first symptom manifest and lasts throughout the disease, but the cause is not the same in each stage and consequently requires careful study and varying treatment in the different stages.

The earliest physiologic alteration is a hyperemia usually occurring at the apices. This congestion of the capillaries is the casual irritation that brings about the cough reflexly through the medium of the nervous system. Here a nerve depressant and vaso-motor dilator is indicated rather than an analgesic and expectorant.

In the next stage of consolidation the hepatized tissue acts as a foreign body and likewise reflexly brings about a useless cough in the vain effort to get rid of itself. In this stage resolution should be established by means of an alterative and the nerves quieted by a sedative.

In the third stage where the tissue has undergone cheesy degeneration and broken down, it really is a foreign body that causes the cough, which can only be relieved by its removal, hence we give stimulating expectorants in combination with sedatives and analgesic to relieve the nervous spasms and consequent pain.

The sum total of the forces of a consumptive is at the most a low figure and we try to keep this up by a hig diet that often deranges other organs whereas regard to the conservation o force by lessening the cough will giv the same result without detriment t other emunctories.

To ally cough, then, has been th aim of therapeutics from time im memorial, and of the different con coctions and mixtures that hav been vaunted and foisted upon long suffering humanity their name is legion

Probably the greatest boon that eve came to us in the form of medicine wa opium, and some form or other of th drug has been and always will be use to a great extent as an ingredient i every cough mixture.

Of the alkaloids of opium, morphi has probably been the most popula until recent years, when codein has claimed considerable attention an threatened to usurp its place; but since the discovery of heroin, by Prof. H Dresser, of Elberfeld, Germany, in 1898 this has been made impossible, and the new analgesic after careful study both in Europe and America has found great favor among practioners, especially in diseases of the respiratory organs.

In the fall of 1900 my attention was called to Glyco-Heroin (Smith), and I tried a sample bottle on a patient with such gratifying results that I determined to make further observations.

What these results were, the clinical record below tells more graphically than worded phrases of description could hope to do.

It does not nauseate, and can be given in teaspoonful doses as often as every two hours to adults, dose of course being graduate in children according to the age, although they tolerate heroin

(*Continued on Page* 526.)

The Sumbul Series

No. 2

In our advertisement of Series No. 1 we gave some valuable formulas and expatiated on our expert experience in preparing Sumbul, at the same time dilated upon the therapeutic value of the drug.

We reiterate there are none so good as

WM. R. WARNER & CO.'S.

The following recipes may interest our readers

TABLETS TONO-NERVINE

WARNER

Ext. Sumbul,	1-2 gr.
Phosphorus,	1-100 gr.
Ext. Damiana,	1 gr.
Ferri Carb.	1 gr.
Asafetida,	1-2 gr.
Ext. Nux Vom.	1-10 gr.

In each tablet.

A VALUABLE TONIC

TONO SUMBUL CORDIAL

THE IDEAL TONIC

12 oz. bottles only.

—FOR—

PHYSICIANS PRESCRIPTIONS

PIL. SEDATIVE

WARNER

℞

Ext. Sumbul,	1-2 gr.
Ext. Valerian,	1-2 gr.
Ext. Henbane,	1-2 gr.
Ext. Cannab. Ind.	1-10 gr.

In each pill.

A VALUABLE SEDATIVE

Specify Warner & Co. when you prescribe and avoid disappointments

---

WM. R. WARNER & CO. MANUFACTURING PHARMACEUTISTS

PHILADELPHIA NEW YORK CHICAGO NEW ORLEANS

When writing advertisers please mention this Journal.

THERAPEUTIC HINTS.

Sunlight and fresh air are nature's disinfectants.

Atropine hypodermatically gives almost immediate relief in athsmatic paroxysms.

A German wit has said: "Physic always does good; if not to the patient, at least to the apothecary."

The inhalation of vinegar after cloroform anesthesia and before consciousness is said to relieve the succeeding nausea.

Burnt alum and tannin, equal parts, dusted on venerial warts and dressed with borated cotton will dessicate them in a few days.

In articutar rheumatism, with a sudden rise of the temperature without invasion of an additional joint, examine the heart early and often for pericarditis.

Tincture of Galegia.—A drachm every five or six hours is said to be a very efficacious galactagogue. Two to four Florida oranges a day is a pleasant remedy and sometimes acts charmingly as a milk producer.

Successive crops of boils are advant ageously treated with six to ten drop of Fowler's solution three times daily

---

A strong solution of bicarbonat soda applied locally to the surface pois oned by rhus toxicodendron, give quick relief.

Don't be too hasty in using the hypo dermic syringe in every case of pain. A thorough examination of your patien may obviate its use.

Fluid extract Ergot, ten to twenty drops every four hours, is a good reme dy to try in cases of bloody urine whe in doubt as to diagnosis.

A seidlitz powder divided into fou doses and one part given every fifteen minutes is an excellent remedy in vio lent vomiting from any cause.

In diarrhoea it is not well to giv opiates, even for the relief of severe pain, before removing the offending material from the intestinal canal.

In labor cases, it is a good plan to have a dose of Fl. Ex. Ergot prepared and set aside for use if needed. You may not have time to prepare it after the delivery.

Verge of Collapse

Colden's Liquid Beef Tonic pulls the exhausted forces together; furnishes staying and resisting power to shattered nerves and presents nutriment to perverted digestive glands in a form eagerly seized on, and transformed into rich blood; steadily brings the whole system away from the danger point—soothing, nourishing, invigorating, building. Wide use in hospital and private practice bears out the verity of each of these statements. Colden's Liquid Beef Tonic commands attention throughout Europe and America. Ext. Carnis Fl. Comp. (Colden) Beef, Brandy, Cinchona. No. 1 with, No. 2 without iron. In their most eligible and active forms.

Sold by druggists generally.

THE CHARLES N. CRITTENTON CO.
115-117 Fulton St., New York
SAMPLES FREE TO PHYSICIANS.
Sole Agents for the United States

(*Continued from Page* 522.)

where opium would produce untoward results.

The greatests advantage this preparation has over all others lies in the fact that it does not contain anything that deranges the stomach, and can be given indefinitely without the patient turning against it.

The majority of cough mixtures contain sugar, which is bound to undergo more or less fermentation; opium, which constipates and affects respiration, and belladonna, which checks the secretions, so that if they are able to lull the patient into oblivion of his condition for a few hours on account of the large amount of narcotic they contain, he awakes to find a stagnation of secretions with renewed paroxyms of coughing, and "pushing the mustard to fanaticism" for further relief he eventuallly becomes a slave to opium.

I have used Glyco-Heroin (Smith) now in over fifty cases, with the unvarying result that it relieved the cough, reduced the temperature, increased the volume of respiration, and allayed the night sweats, while at the same time it did not derange the stomach or cause constipation, did not produce vertigo nor nausea, never weakened the respirations, nor caused deleterious effects upon the heart, so that I can frankly say that without doubt we have in this compound the ideal cough mixture for the cough of phthisis pulmonalis.

The cases that I here quote I have selected from a series of fifty-three, with the idea of not citing cases so near alike as to produce monotonous repetition, no matter how gratifying the results.

As has been well said of this preparaton, it is not only a true pharmaceutical product but an ethical one as well, and one that the physician can use understandingly, as its composition an physiological action are well known.

Unfortunately all good things ar sooner or later imitated, and somethin put forward as just as good but cheap er, and Glyco-Heroin (Smith) is no ex ception to this rule, so if results are no satisfactory, substitution must be at th bottom of it

Observation One.—Mrs. Marie B. aged 32, father living in good health mother died several years ago, does no know cause of death.

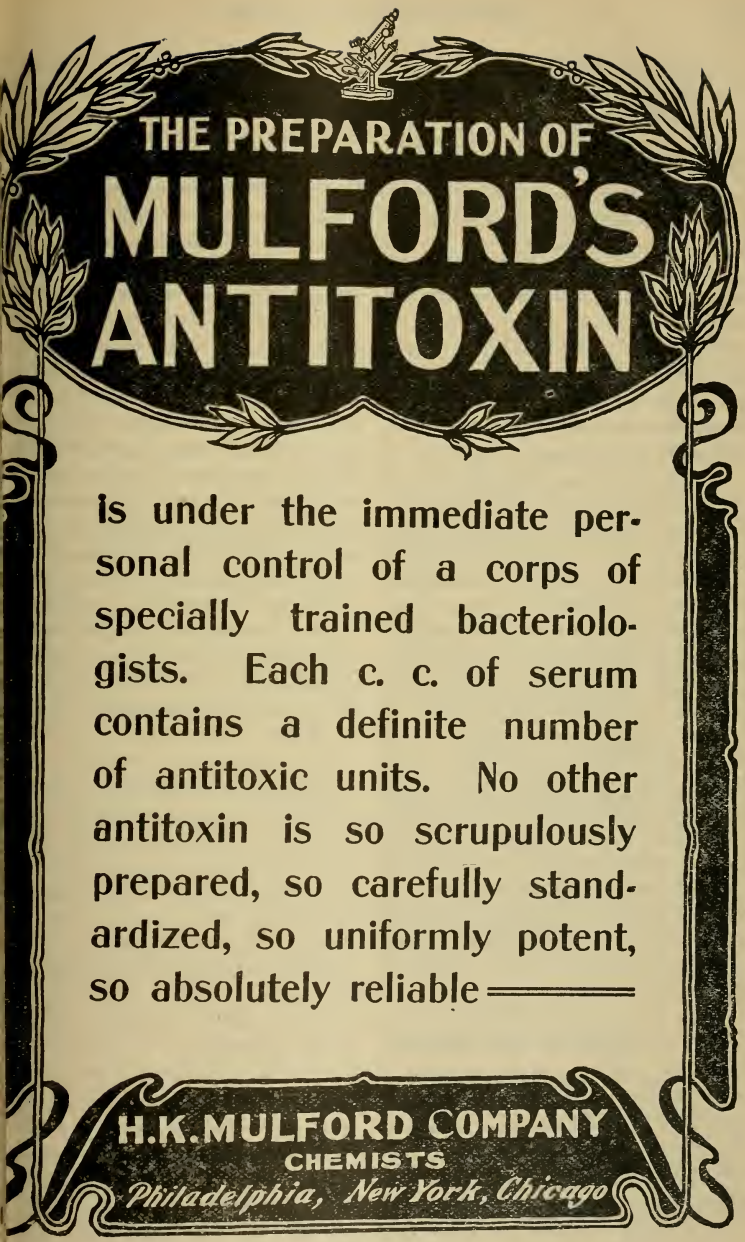
She was thin, and her complexio was of a muddy, yellow color whe first examined. Weight 122½ pounds pulse, 100; temperature, 100 degrees F Respirations 36 and difficult.

She had a fairly good appetite, bu was constipated. She menstruates regularly, but has coughed and expectorated for two or three years. Sputum analyzed showed the presence of tubercle bacilli. She had a pleurisy eight years ago the result of a cold, both lungs were affected since then, crepitant rales throughout, and areas of congestion here and there.

Her sputum had been tinged with blood but she has never had any hemorrhages.

I gave her an emulsion of cod liver oil, and Glyco-Heroin (Smith) in teaspoonful doses every two hours. The cough was relieved from the first and after four months had entirely disappeared. The lungs cleared up, no more rales or areas of congestion, and she gained ten pounds in weight.

Observation Two—Miss E. M., aged 32, unmarried. Had been ill six months before coming to me for treatment, and a diagnosis of tubercular laryngitis had been already established by someone else.


THE PREPARATION OF
MULFORD'S
ANTITOXIN
is under the immediate personal control of a corps of specially trained bacteriologists. Each c. c. of serum contains a definite number of antitoxic units. No other antitoxin is so scrupulously prepared, so carefully standardized, so uniformly potent, so absolutely reliable
H.K. MULFORD COMPANY
CHEMISTS
Philadelphia, New York, Chicago

There was dullness on percussion over nearly the entire area of both upper lobes of the lungs, she had night sweats, fever, and a persistent cough, raising considerable. She was pale and emaciated, highly excitable and nervour; pulse 110, temperature 102 degrees F., respirations 26.

Microscopic examination of the sputum revealed the presence of the tubercle bacilli.

On laryngoscopy I found an extensive ulcerative process on the posterior wall of the larynx just above the vocal cords, and both epiglottidian folds were congested and swollen.

Besides the local treatment for her throat trouble and constitutional care I gave her Glyco-Heroin (Smith), one teaspoonful to be taken every two hours

There was marked improvement after the first twenty-four hours, and she said she had slept well through the night, had coughed scarcely at all, freedom from which distressing symptom she had not enjoyed for months.

The temperature gradually went down to normal, the night sweats ceased, and in a little over one month's time the cough had left her entirely. The ulcer in the larynx was finally healed, which relieved her hitherto painful deglutition; besides this she gained flesh and strength, due, undoubtedly, to the conservation of force which the mitigation of the cough afforded.

Mrs. I. T., aged 35, had one sister who was tuberculous. She had been ill for over ten years when she came to me; previous to her bad feelings she had been operated on for prolapsis; about five years ago first noticed that her abdomen was increasing in size. This proved to be due to a fibroid tumor which grew to such an extent that her abdomen measured thirty-seven inches in circumference. She had coughed for about six years, but her aspect was fairly good; she weighed 137 pounds, but was nervous and impressionable; respirations were 20, pulse 83, temperature 101.1 degrees F.

Physical examination revealed numerous moist rales on the right side and her sputum on microscopic examination showed the tubercle bacilli.

She was given Glyco-Heroin (Smith) in conjunction with constitutional treatment, and received local electrical treatment from the hands of a specialist At the end of eight months her abdominal measurement was reduced to thirty-three inches, cough and expectoration had entirely disappeared, as well as the moist rales, and her temperature, pulse, and respiration became normal.

Whether her cough was entirely due to the lung trouble or was partially due to the uterine difficulty I was unable to determine, but granting both factors as a cause, Glyco-Heroin (Smith) cured it.

Sanmetto in Prostatitis, Urethitis, Cystitis.—I have used Sanmetto extensively in my practice for some years, and in well chosen cases have always gotten good results. I look upon it as a most valuable remedy in prostatitis, urethritis, cystitis, and in fact all inflammatory conditions of the genito-urinary tract.

W. J. Chittock, M. D.
Jackson, Mich.

The Advantages of Combining Remedies.—John Moir, L. R. C. P. & L. R. C. S. Ed., in *"The Therapist,"* London, says: "Latterly I have been using heroin very extensively in tablet form in combination with antikamnia, and

found the combination to act charmingly, both for relieving pain and in procuring comfortable, restful sleep, so very desirable and necessary after sleepless periods, caused by a protracted, irritable cough. The soothing rest in these cases was also characterized by a light, but well-marked fall in temperature; but the greatest benefit of all in this treatment is that, although the distressing frequency of the respiration was reduced, it was stronger and heavier and less spasmodic, with a beneficial effect upon the heart at the same time. The tablets I use contain antikamnia 5 grs., heroin hydrochlor 1-12 gr., and were given every two, three or four hours, in cases of cough, bronchitis and respiratory affections generally, according to the severity of the symptoms, but usually one tablet every three hours. I found that the respiration was rendered easy, the expectoration was loosened without difficulty, and sleep was more readily obtained than with morphine, and unlike morphine, there were no after-effects. I have, personally, been taking Antikamnia & Heroin Tablets three times a day for an irritating cough, with occasional inclination to breathlessness; so that I have every reason to be thoroughly satisfied with them as sedatives and calmatives."

Palatable, Yet Effectual.—There is a widespread belief that physicians, as a rule, consider well-founded, that cod liver oil is not only a remedy of decided power, but a food of very high value. Every physician knows, however, that a very large number of patients who should and doubtless would, get much good from it, cannot, or will not take it. This is largely due to the

DOCTOR:

HAVE YOU USED LEU-KRE-TOL

THE NEW ANTISEPTIC

COMPOUND?

The Formula combines, under heavy trituration, the following drugs: Acinum Boracicum, Acidum Carbolicum, Menthol, Hydrastine Sulphas, Sodii Boras, Alumen, and Glycerinum. The powder will readily go into solution and is not only an Ethical, Scientific Pharmaceutical product, but also a pleasant, nor irritating and efficient preparation.

PHYSIOLOGICAL ACTION:

Antiseptic, Disinfectant, Deodorizer, Astringent and Antiphlogistic, reducing inflammatory exudates by its exosmotic action.

THERAPEUTICAL INDICATIONS:

Catarrhal conditions of nose and throat, tonsillitis, pharyngitis, hoarseness, etc. Usual ℞ being (Leu-Kretol ʒi Glycerine ʒiv Aquæ Q S. ʒvi) either as Douche or Spray.

VAGINAL DOUCHE:

Especially valuable in Leucorrhoea, Vaginitis, Urethritis, Gonorrhœa, Pruritus, Septic conditions of Puerperal State, (being a superior remedy to Creolina, etc..) and in all offensive Uterine and Vaginal discharges. (ʒi to 1 Qt. of hot water.) Samples and literature on request.

Don't forget the name LEU-KRE-TOL.

Manufactured by the

LEU-KRE-TOL CHEMICAL CO.

Baltimore, Md.

Branch

Winston-Satem, N. C.

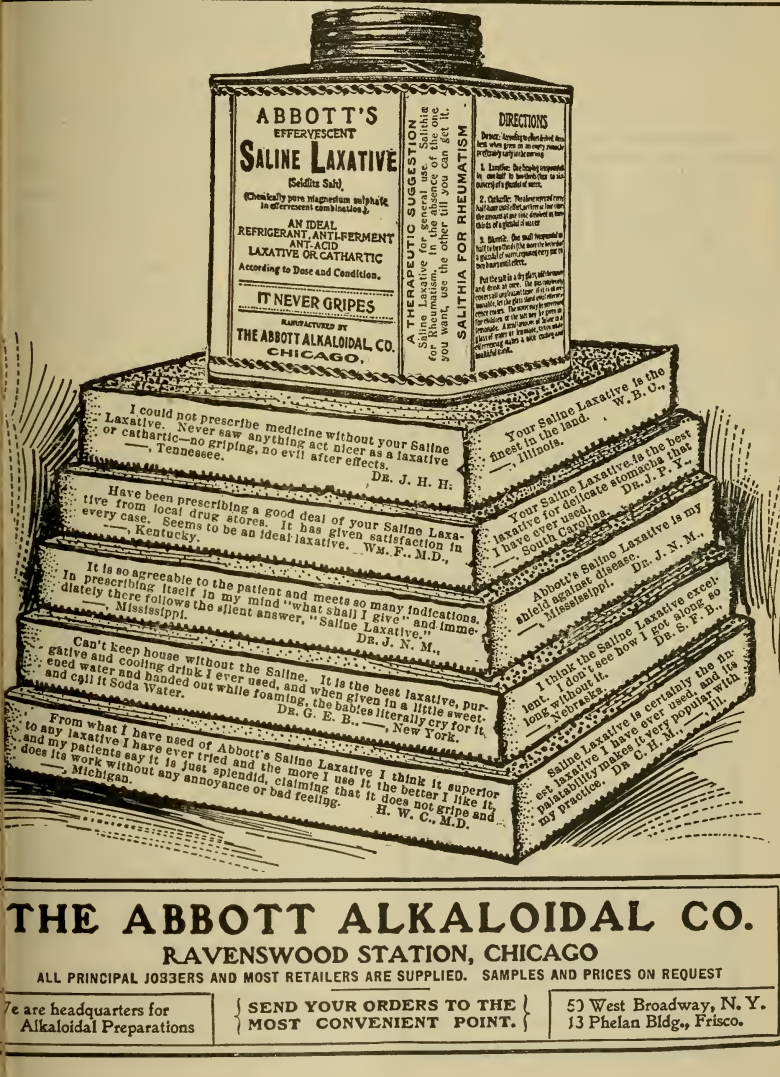
fact that the ordinary preparations are so nauseating as to cause serious digestive disturbances, while in many cases the stomach will not even retain them. It is notorious that the so-called "tasteless" preparations are indeed tasteless because they contain no cod liver oil, but there is a preparation that contains all the potent elements of cod liver oil in a form pleasant to the taste and agreeable to the weakest stomach. We refer to Hagee's Cordial of Cod Liver Oil with Hypophosphites of Lime and Soda. Eminent physicians pronounce it a triumph in modern chemistry and prescribe it when cod liver oil treatment is indicated. In our hands results with it have been most satisfactory.—*Massachusetts Medical Journal.*

Epilepsy.—How little we know about the nature and cause of this disease. No more difficult problem confronts the physician than when he is called upon to prescribe for a disease, the nature and cause of which is as obscure as is that of epilepsy. With no pathological lesions to lighten our path to the goal of defining therapeutics, is to be wondered that theory takes the place of theory in regard to its nature and that empiricism is the order of the day in its therapy? Few diseases have seen a greater galaxy of remedies arrayed against them than has epilepsy, and in few has the disappointment from most of them been so great. The bromides, which during the last fifty years have held the center of the field in the theapy of epilepsy, have not escaped serious objections, since it is acknowledged that they do not cure the disease, but on the other hand work serious mental mischief in numerous instances. Acknowledging the fact that for the present, at least, the treatment of epilepsy must be based upon experience, the aim of the physician must be to select such a remedy, which a large experience has shown to produce the best results, with no deleterious effects. Such a remedy is hydrocyanate of iron (Tilden's). The remarkable and permanent cures wrought with this preparation in numerous cases vouched for by numbers of the most experienced and skillful practitioners and neurologists in the country, entitle hydrocyanate of iron (Tilden's) to a place in the front rank as a remedy for epilepsy and incidentally in such neuroses as cholera, migraine and nervous headaches, for which it has proved itself of exceptional value. Hydrocyanate of iron (Tilden's) must not be confounded with any other remedy which purports to be similar. It is a distinct preparation whose process is known only to the Tilden Company and in whom is also vested the right to the use of the name hydrocyanate of iron. To avoid substitution, therefore, physicians should specify hydrocyanate of iron (Tilden's) and avoid the uncertain results of inferior spurious substitutes.—*Extract from the September,* 1903, *Issue of the Southern Clinic, Richmond, Va.*

A Diagnostic Chart of Tumors and Pseudo-Tumors.—Battle & Co. have just issued a complete and unique chart on the above subject, compiled by Dr. Edward C. Hill from standard works on surgery and pathology. The subject matter is divided into solid neoplasms (subdivided into benign and malignant growths) and true and false cysts. The general charcteristics of each division are given, and their 24 classes, embracing over 100 varieties, are compared critically in columns under the following headings: Tissue, topography,

It Stands on Its Merit

(MONEY BACK IF NOT SATISFIED)


ABBOTT'S
EFFERVESCENT
SALINE LAXATIVE
(Sedlitz Salt)
(Chemically pure Magnesium sulphate in effervescent combination.)
AN IDEAL
REFRIGERANT, ANTI-FERMENT
ANT-ACID
LAXATIVE OR CATHARTIC
According to Dose and Condition.
IT NEVER GRIPES
MANUFACTURED BY
THE ABBOTT ALKALOIDAL CO.
CHICAGO.
A THERAPEUTIC SUGGESTION.
Saline Laxative for Rheumatism. In the absence of the one you want, use the other till you can get it.
SALITHIA FOR RHEUMATISM
DIRECTIONS
I could not prescribe medicine without your Saline Laxative. Never saw anything act nicer as a laxative or cathartic—no griping, no evil after effects.
DR. J. H. H.
——, Tennessee.
Your Saline Laxative is the finest in the land.
W. B. C.,
——, Illinois.
Have been prescribing a good deal of your Saline Laxative from local drug stores. It has given satisfaction in every case. Seems to be an ideal laxative.
WM. F., M.D.,
——, Kentucky.
Your Saline Laxative is the best laxative for delicate stomachs that I have ever used.
DR. J. P. Y.,
——, South Carolina.
It is so agreeable to the patient and meets so many indications. In prescribing itself in my mind "what shall I give" and immediately there follows the silent answer, "Saline Laxative."
DR. J. N. M.,
——, Mississippi.
Abbott's Saline Laxative is my shield against disease.
DR. J. N. M.,
——, Mississippi.
Can't keep house without the Saline. It is the best laxative, purgative and cooling drink I ever used, and when given in a little sweetened water and handed out while foaming, the babies literally cry for it, and call it Soda Water.
DR. G. E. B.,
——, New York.
I think the Saline Laxative excellent without it. I don't see how I got along so long without it.
DR. S. F. B.,
——, Nebraska.
From what I have used of Abbott's Saline Laxative I think it superior to any laxative I have ever tried and the more I use it the better I like it, and my patients say it is just splendid, claiming that it does not gripe and does its work without any annoyance or bad feeling.
H. W. C., M.D.
——, Michigan.
Saline Laxative is certainly the nicest laxative I have ever used, and its palatability makes it very popular with my practice.
DR. C. H. M.,
——, Ill.

THE ABBOTT ALKALOIDAL CO.

RAVENSWOOD STATION, CHICAGO

ALL PRINCIPAL JOBBERS AND MOST RETAILERS ARE SUPPLIED. SAMPLES AND PRICES ON REQUEST

We are headquarters for Alkaloidal Preparations

SEND YOUR ORDERS TO THE MOST CONVENIENT POINT.

50 West Broadway, N. Y.
13 Phelan Bldg., Frisco.

AGENTS WANTED

Who reside in North or South Carolina, to sell our goods to houses and stores. Money can be made. For terms and particulars address, with reference,

A. M. AKE,
119 Ninth St., Jersey City, N. J.

DID YOU EVER **ENJOY A MEAL IN BED?**

Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
300 Rose Bldg., CLEVELAND, O

Keeley Cure

For Drunkenness and Drug Using

Please write us. Correspondence confidential.

THE KEELEY INSTITUTE, Dept. K, Greensboro, N C

Our Illustrated Handbook Sent Free On Request

NEURILLA

SOOTHES, CALMS AND REGULATES THE NERVES.

INDISPENSABLE FOR NERVOUSNESS.

No bad effects follow its use.

DAD CHEMICAL CO., NEW YORK.

number, size, conformation, color, consistence, mobility, sensibility, surrounding tissues, occurrence, history of growth, and miscellaneous points. Features of special differential value are emphasized by the use of italics. This chart shows almost at a glance for ready comparison all that could be learned in a diagnostic way from the perusal of hundreds of pages of ordinary text. It stands indeed to such books as an atlas does to a gazetteer. This very convenient and valuable compendium is at the command gratis of any and every practioner of medicine, who will take the trouble of writing a postal card to Battle & Co., 2001 Locust street, St. Louis.

Nothing gives as large returns in proportion to space covered and labor expended as a well kept strawberry bed planted in really choice varieties. Let all in need of plants read ad. of Continental Plant Co. in this issue. They offer also all kinds of fruit trees.

"Paraldehyde" possesses many of the good without the evil qualities of chloral. Used in insomnia resulting from various causes. The objectionable taste of the chemical is, to a large extent, disguised in Robinson's Elixir Paralrehyde (see page 541), which is an elegant preparation.

Many of the genito-urinary diseases, which have heretofore depended for a cure upon the different salts of lead, zinc, copper, or silver, now yield permanently and promptly to S. H. Kennedy's Ext. of Pinus Canadensis. In all inflammatory processes, in fact, whatever may be the stage of malady, this remedy acts successfully. Through

WITHOUT RESPIRAZONE

(Tilden's)

ASTHMA remains the BETE NOIR of Physicians.

WITH RESPIRAZONE

(Tilden's)

ASTHMA has lost its terror.

It gives prompt relief in Asthma, Hay-fever and all spasmodic respiratory diseases.

NARKOGEN.

(Tilden's)

HYPNOTIC, ANODYNE, ANTI-SPASMODIC.

A Step in Direction of Definite Therapeutics.

Each fluid dram contains:

Hydrate Chloral.....grs. x
Potass Bromide..... grs. x
Hyoscin Hydrobromate.....grs $\frac{1}{200}$
Narkine (Tilden's).....grs. ss

"A new Valuation of all Values."

Prepared expressly for Physicians' Prescriptions.

THE TILDEN COMPANY,

Manufacturing Pharmacists.

New Lebanon, N. Y. St. Louis, Mo.

ts astringent properties it lessens the caliber of the arterioles, minute vessels nd ducts, favorably influencing their ecretions, and rapidly bringing about esolution. Even in rheumatism and in arious other conditions requiring an xternal stimulating application, it is a ery superior therapeutic agent, and in-ernally it is an efficient remedy in py-osis, and stomach, colic, diarrhea, and ysentery.

Eczema is often rebellious, tiresome like to patient and physician. Send our address to Wheeler Chemical Works No. 2 State St., Chicago, and eceive a free sample of a most success-ul remedy in eczema, a clear, odorless olution, named Noitol.

For Nasal Catarrh.—Nasal catarrh is lways "endemic," but at some seasons is "epidemic." An efficient treatment the application of iodo-vapo by means

STRAWBERRY PLANTS.

The Largest Stock in the World.
Nearly 100 Varieties.

All the choice, luscious kinds for the Garden and Fancy Market. Also Shipping Varieties. Also **Fruit Trees of all kinds to Growers at Wholesale Rates. We will save you half in planting an orchard.** Dewberries, Asparagus, Rhubarb, Grape Vines, etc., etc.

Our 120 page Manual, free to buyers, enables everybody to grow them with success and profit.

All plants packed to carry across the continent fresh as when dug. Illustrated catalogue free. Specify if you want catalogue of Shipping Varieties or fancy Garden kinds.

CONTINENTAL PLANT CO.,
Kittrell, N. C.

of any good vaporizer or atomizer 3 to 5 times daily. If there is much discharge, it is better to first cleanse the parts with Gylco-Thymoline or Leukretol.

Vaginal discharges, like the poor, are ever found in the doctor's practice. An elegant, efficient, yet inexpensive agent for the relief of this condition is: Luekretol, one heaping teaspoonful; water, hot as desired, one quart;.

Sig.: Flush the parts night and morning.

Try it, doctor; it will not disappoint you.

Have used Neurilla in a case of nervousness, due to insomnia, with very excellent results. In cases of nervousness at the menstrual period, I believe it is the remedy "par excellence." I shall continue to prescribe it.

J. O. GARDNER, M. D.
184 W. Main Street, Massillon, Ohio.

Sanmetto in Enlarged Prostate, with Suppression of Urine, and Chronic Inflammation of Bladder.—I have used Sanmetto in enlargement of the prostate, suppression of urine and chronic inflammation of the bladder, and can recommend its use for any and all of the troubles of the urinary tract.

J. A. WILSON, M. D.
Columbus, Ohio.

Modern pharmacy has given us remedies that are new and valuable in the treatment of diseases and some that are not so successful. Doctor, let us have some of your recent experiences.

MEDICAL NEWS AND ITEMS.

Yellow fever is in Texas.

Manila has a death rate of 21.02 per 1,000 population.

A goat's milk dairy has been started in Madden, Mass.

Cholera infantum claimed 100 victims during August in Buffalo.

One and a half million quarts of milk are distributed in New York city every morning.

Two Philadelphia physicians were recently fined five dollars and costs each for failing to report cases of smallpox coming under their observation.

Dr. F. T. Miles, one of Baltimore's most eminent physicians, died in that city on July 30. He was a pupil of Charcot and Hulings Jackson, and the first neurologist in Baltimore.

Of the $125,000 appropriated for the new marine hospital at Buffalo, $22,000 is to be expended for the site, $100,000 for the building, and some $3,000 for unforseen expenses and for beautifying the grounds.

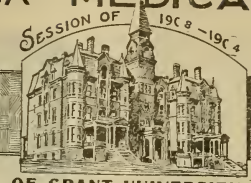
The American Orthopedic Association will publish early in August the first number of a new quarterly, the *American Journal of Orthopedic Surgery*. It will replace the Transactions, formerly published by the association.

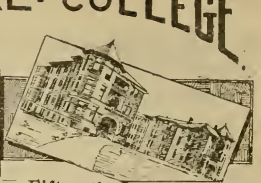
Quackery in Racine, Wis.—The physicians of Racine have decided to wage war upon quacks, with whom their town seems to be especially infested. Representations will be made to the district attorney and a series of vigorous prosecutions inaugurated.

The Organization Committee of the Universal Exhibition to be held at St. Louis has announced that it will refuse admission to all articles actually or po-

CHATTANOOGA · MEDICAL · COLLEGE

SESSION OF 1903-1904





MEDICAL DEPARTMENT OF GRANT UNIVERSITY. Fifteenth Annual Session begins in October and continues until April. New buildings. Delightful climate. Large patronage. Every facility. A full teaching corps. Laboratories with latest equipment. Modern methods of instruction. Excellent hospital Minimum living expenses. City one of the most beautiful in America, both by nature and art. National Military Park, National Cemetery, and miles of splendid Government Boulevards. Scenic surroundings unexcelled on this continent. Requirements those of Southern Medical College Association.

E. A. COBLEIGH, M. D., Dean, Chattanooga, Tennessee.

University of Maryland

SCHOOL OF MEDICINE.

The Ninety-Seventh Regular Session will begin October 1st, 1903, and continue until May 15th, 1904. Four Years Graded Course. New Laboratory building. Excellent Laboratory Equipment. Clinical Advantages Unsurpassed. For catalogue and other information, address

R. DORSEY COALE, Ph. D., Dean,

University of Maryland, *Baltimore, Maryland.*

University of Virginia,

Medical Department.

CHARLOTTESVILLE, VA.

The course of instruction in this Department extends over four full sessions of nine months each, and embraces a full series of didactic lectures with ample practical work in Anatomy and Operative Surgery in the Biological and Pathological Laboratories.

A Modern Teaching Hospital.

Session begins 15th September.

For catalogue, adddress . . . . . **J. M. PAGE, Chairman.**

COLLEGE OF PHYSICIANS AND SURGEONS OF BALTIMORE, MD.

Thirty-Second Annual Session will begin October 1st, 1903. New building, modern equipment, unsurpassed laboratories, large and independent Lying-in Asylum for practice obstetrics, and many hospitals for clinical work, present to the medical student every advantage. For catalogue and other information, apply to

THOMAS OPIE, M. D., Dean, Cor. Calvert and Saratoga Sts., Baltimore, Md.

When writing advertisers please mention this Journal.

tentially hurtful or dangerous. In this class are included patent medicines the formulae of which are kept secret.

The enormous increase of insanity in Ireland (28,178 cases in 1881, 44,884 in 1901) is believed to be due largely to the fact that the large emigration of young and healthy persons leaves behind a stock more prone to all diseases, including insanity, than formerly.

Dr. George Doughton, of North Wilkesboro, one of the best physicians in North Carolina, died in Baltimore on September 24th. The immediate cause of his untimely death, at the age of 38 years, was an operation performed for the removal of a cancer from the neck.

The average of accidents during the Automobile Club fortnight in Ireland did not reach that of an ordinary driving tour, or a week of racing on the flat. At Cork an Irishman said, "Sure it was very successful, but there were no accidents at all." The "but" is delightful.—*Medical Age.*

It is said that the board of health has secured a large frame house at One Hundred and Nineteenth street and Pleasant avenue for the purpose of establishing a hospital to be used solely for the treatment of trachoma. There are nearly 100,000 cases of the disease in the city of New York.

Ten medical inspectors of the borough of Brooklyn have recently been tried upon the charge of having permitted premises to be disinfected while contagious diseases were still in progress. Three of the inspectors were dismissed, four were fined, one was censured, and two were exonerated.

The report upon typhiod fever and dysentery among the British troops in the South African war appeared in August. It is said to be a bulky volume, but that part of its contents which will appear most forcibly to the average mind is capable of very brief statement. The cost of typhiod fever is said to have been $20,000,000.

CUTS MADE BY THE MEMPHIS ENGRAVING CO. CUTS FOR ALL PURPOSES. MEMPHIS, TENN.

Engraved Invitations and Cards.

The building now occupied by the dental department of the University of Maryland is to be replaced by a four story building, 90 feet by 100. The two lower floors will be used by the dental department, and the two upper floors will be used by the medical departments for laboratories. The cost of the new building will be $50,000.

The "Refracting Optician."—A citizen is about to bring suit against a dry goods firm for injury alleged to have been done to his daughter's eyes by the improper "refracting" of an employee. An oculist is said to have stated that irreparable injury had been done through strain, and the father demands damages in the sum of $50,000.

Dr. J. Allison Hodges, of Richmond, Va., will open on October 15th, the Hygeia Hospital, at 101 West Grace street, as a private sanitorium for his patients. It is designed for the treatment of medical diseases (actute and chronic) only, and will be fully equipped for that specific purpose. The most modern scientific methods of treatment including all approved measures known to physiologic therapeutics, will be available.

It was recently the trying task of Dr George Ryerson Fowler, of New York,

o operate upon his own son for appen-
licitis. The son, who is himself a sur-
geon, insisted upon his choice of an op-
rator, and the father had the fortitude
o consent. Both have extraordinary
ause to rejoice at the successful issue.
Many years ago Dr. Lewis A. Sayre
perated upon his son for hip-joint dis-
ase, but such things are and must
lways be rare.

The oleomargarine manufacturers
ave discovered a means of coloring
heir product which defies chemical de-
ection. As the presence of added col-
ring matter cannot be demonstrated,
his imitation of butter must be passed
y the revenue officers at the minimum
ax of one-quarter of a cent a pound.
he tax on artificially colored oleomar-
arine is ten cents a pound, and the
aving is said to have led to a great in-
rease in the output of oleomargarine
olored to resemble butter.

Smallpox is not diminishing in Phil-
delphia. In the week ending August
5 there were five deaths among thirty-
x cases of smallpox. Two physicians
ave been fined for the failure to re-
ort cases of smallpox. It is by no
eans likely that smallpox will again
come so widely prevalent in Phila-
elphia as it was a year ago. The De-
artment of Health is now well organ-
ed and very well officered, and, with
ch popular support as it is entitled to,
ould master the situation.

Not Race Suicide.—The astonishing-
low birth rate recorded at Washing-
n, D. C., for the week ending Sep-
mber 12th, was due, it is said, not to
relessness on the part of the physi-
ans or to sudden illness on the part of
rents, but to a clerical error which
sinterpreted the figures of 193—the
al number—for 34—the number re-
rded. The mistaken clerk is stated to

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:

8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

THE M. J. BREITENBACH CO.

We call attention to the colored plates of pathogenic organisms that have been prepared for the profession by the house of M. J. Breitenbach Co., the importers of Gude's Pepto-Mangan.

No text-book and no one work on pathogenic bacteria contains such a number of excellent diagnostic illustrations, nor such beautiful examples of lithographic art, as these.

Many physicians are too far from libraries and laboratories to be able to put into practice the training of their college days. They need just such a set of reference plates to be able to make microscopical examinations. The recognition of this need and the care that has been taken to fill it shows a spirit of enterprise in this firm that we wish might serve as an example to others. For, if, instead of advertising to the public, the manufacturers of drugs would make such valuable contributions to science as lies in their power, there might be more sympathy between them and physicians.

No expense has been spared by the M. J. Breitenbach Co. in having the chart accurate.

The original sketches were in water-colors by one of the leading bacteriologists in this country.

Being reproduced in the minutest details by the best skilled artists in lithography.

There are sixty separate examinations represented, requiring the services of four skilled artists to make the orignal drawings from sketches.

Time consumed, twelve weeks each: or labor for one man forty-eight weeks.

The labor of proving same required the time of three provers five weeks each, or the total time of one man fifteen weeks.

Eighty lithographic stones were used for the drawings and proving original designs.

The time for transferring and prining of all colors was sixty-one days.

The chart passed through the printing press sixteen times. Colors used:—black, yellow, red, dark blue, purple, buff, light blue, medium blue, medium purple, light purple, light pink, medium pink, green, brown, gray.

The full set of sixty cuts has been prepared to send to any physician who writes for them, from the firm of M. J. Breitenbach Co., New York.

be an octogenarian, one of the kind "tha never dies or resigns, but simply drie up in office and blows away."—*Ne York Medical Journal.*

An interesting case of longevity of feeble youth was revealed in a polic court of Paris. A man called to com plain of a burglary in his apartment; h said his name was Duval, and that hi age was 100 years. The story was confirmed by his papers. Duval was bor July 4, 1803, and as a youth, was refused as a conscript. He has lived i one house ninety-nine years, and ha grown progressively stronger. He eat and drinks well, walks strong, and ha a stentorian voice. He remembers seeing Nepoleon in 1813.—*Exchange.*

The Phillip Knoll prize of 2,00c crowns was awarded this year for the first time, and not strictly in accordance with the ideas of the founder. It should be awarded to some one of the younger German-Bohemian scientists for the best work done in the last three years. Instead of that, it was divided among Professor Bayer and Dr. J. Langer for work on congenital hernia and the lymph glands and bee poison, both dating from several years ago, and A. Fischel and O. Bail for recent research. —*Journal of the American Medical Association.*

The Pairs authorities have bestowed medals on seven nurses in the hospitals who during the past year have contracted a contagious disease from some patient in their care. The medal is awarded to "victims of professional duty." A pension is given the family or persons who have died, "victims of professional devotion" referring to some exceptional act of self-sacrifice. This pension was recently awarded to the family of a young French physician in Algiers, who himself proceeded to disinfect the

THE PRESBYTERIAN HOSPITAL

Will Receive all Classes

Of Medical and Surgical Cases,

(EXCEPT CONTAGIOUS.)

A Full Corps of PHYSICIANS

and SURGEONS in Attendance.

Address,

PRESBYTERIAN HOSPITAL,

Charlotte, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain CACTINA, the active proximate principle of CEREUS GRANDIFLORA.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for
INDIGESTION

A palatable preparation of PANAX SCHINSENG in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

JOHN R. IRWIN, M. D.,

CHARLOTTE, N. C.

Special Attention Given Surgery and Gynecology.

CHAPARRIN

IS AN ESTABLISHED THERAPEUTIC AGENT

FORMULA:

The active principles of Chaparro Amargoso in Chemical Combination with Phenol, Camphor and Salicylic Acid.

CHAPARRIN

Is pronounced the most satisfactory therapeutic agent now at the command of the profession for local treatment of skin diseases. Speedy and permanent relief follows in much less time than under other methods of treatment. Applied in sufficient strength, Chaparrin always allays itching.

ADDRESS:

The Matthewson Laboratory,

Marshall, Texas.

= IN =

ECZEMA, PSORIASIS, SCABIES

AND OTHER

SKIN DISEASES.

Physicians are requested to have their druggists order half dozen Chaparrin for prescription use. Prices include postage:

1 2-Oz. Bottle, -$1.00
1 4-Oz. Bottle, - 1.75
6 2-Oz. Bottles, - 4.75

premises where plague had occurred when no one else would approach the place.—*Exchange.*

The "National Dental Association" at the recent meeting, held at Asheville, N. C., passed the following resolution: "Resolved, That it is the sense of the 'National Dental Association' that each medical college in the United States should include in its curriculum a lectureship on 'Oral Hygiene, Prophylaxis, and Dental Pathology.'" "The dental profession feels that with the introduction of the teaching of Oral Hygiene in the public schools, which they are striving to accomplish, and the co-operation of medical men who have been specially instructed on this subject, that a great stride will have been made toward the prevention of caries of the teeth, not to mention many other good results of the general system, which would surely follow a better care of the oral cavity." This movement is worthy of our consideration, brother doctors and a helping hand. A little more knowledge of the teeth would come in very handy many times during the working life of the average doctor.

Largest Fees on Record.—One of the largest fees on record is that received by Dr. Dimsdale, an ancestor of the ex-lord mayor, for inoculating Catherine II, Empress of Russia, against smallpox in 1762. The fee itself was $50,000 but, in addition, the fortunate physician got $100,000 for traveling expenses, with a life pension of $2,500, the title of baron, the rank of a counsellor of state, and the office of physician-in-ordinary to the Empress, who further graciously gave him her portrait. In 1792 an English physician, Dr. Francis Willis, went to Lisbon to undertake the treatment of the Queen of Portugal on the following terms: Five thousand

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these Preparations.

A

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

R Each fluidounce contains:

Hypophosphites Soda	2 gr.
" Lime.....	1½ gr.
" Iron.....	1½ gr.
" Quinine.....	¾ gr.
" Manganese..	1½ gr.
" Strychnine..	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate Sodium	12 grains
" Potassium	4 "
" Calcium	4 "
" Iron	2 "

FREE Monohydrated Phosphoric Acid 16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE.—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

C

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence o a sedentery life, coupled with nervous and mental stal strain.

Reliable Pepsin is one of the best Digestive agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating. Children, one half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromaticmenstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable.

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50.

N. B.—We also make 25 per cent. strength.
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

aloform, in Powder, per ounce.....	$1 25
aloform, 5-grain Tablets, per 100	1 25
aloform Elixir, pints	2 00
olution Albuminate of Iron, Syrup Albuminate of Iron Comp , pints.....	1 00
olution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints.....	1 00

lease specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

ounded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

When writing advertisers please mention this Journal.

CATARACTS!

USE Succuss Cineraria Maritima. (BARNES'.)

Successfully used for removal of CAPSULAR and LENTICULAR CATARACTS, CORNEAL OPACITIES.

Does not cause Inflammation.

Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy :

"Mrs C—, aged 73. The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis : gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Succuss Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

Dr. Osmon Royal, under date of June 4th 1903, writes :

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Succuss Cineraria (Barnes)."

Dr. E. V. Cobb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Succuss Cineraria Maritima (Barnes).

MADE FROM THE FRESH GREEN PLANT ONLY.

$1.00 per vial 2 drachm. $3.00 per oz. by mail, post paid

Send for literature. Made exclusively by

THE BOTANIC DRUG COMPANY,

BRIDGEPORT, ALA., U. S. A.

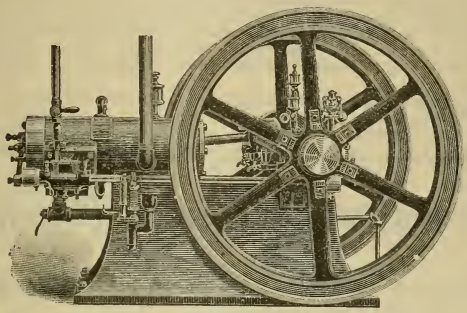
dollars per month as salary, the expenses of his journey, a table for himself and suite, and $100,000 if he were successful. The largest medical fee of which we can find record is that said to to have been given to the blind physician, Dr. Gale of Bristol, who received $250,000 from a wealthy patient, whose knee he had cured by electric treatment. —*Maryland Medical Journal.*

Scientific Experiments With Snakes. —In the pathological laoratories of the University of Pennsylvania an investigation, designed to discover antidotes for all kinds of snake poison, is conducted along lines suggested by Dr. S. Weir Mitchell, and the Carnegie Institute has granted an appropriation to assist the work. Many experiments are made with rattlesnakes, cobras, and other poisonous reptiles, and the effects of their venom upon animals are studied. The physicians regard alcohol taken internally, as a valuable stimulant but not as an antidote. The most valuable remedial agent is the intermittent ligature—a band about the wounded limb, which is loosened for an instant at stated intervals, thus allowing the poison to enter the system in very small quantities. In this manner the patient is enabled gradually to overcome the effects of the poison.

"There is nothing the matter with you," persisted the Eddyite, "absolutely nothing. Can I not convince you?" "Let me ask you a question," replied the sick man. "A thousand, if you like." "Well, suppose a man has nothing the matter with him, and he dies of it, what didn't he have the matter with him?"

GAS AND GASOLENE ENGINES

Available for all Power Purposes, and built in sizes from one to 100 H. P.



THE FAIRBANKS COMPANY.

"FAIRBANKS" STANDARD SCALES.

19 and 21 Light Street, - - - - - BALTIMORE, MD.

Write for catalogue and particulars.

Slow Repair to Swift Destruction.—An indication of the enormous cost of time as well as money involved in attempts to repair the damage done by forest destruction is given by Mr. George W. Rafter, in Water Supply Paper No. 80, of the Geological Survey. Concerning the proposition to reforest the Croton watershed, wherby it is calculated, the daily supply of New York city water could be increased 75,000,000 gallons, Mr. Rafter says that 120 years would be needed to produce the full effect of forestation, and by the expiration of that time the original cost, compounded at three per cent. interest, would amount to about $780,000,000.

"Sowing wild oats" would not be so reprehensible a habit in a man if he did not nearly always get a woman to assist in their reaping.

NOITOL

Is not a Salve, Ointment, Soap, Tar, or other disagreeable preparation, but a limpid, inoffensive, odorless solution, as its name *spelled backward* indicates.

SAMPLES GRATIS.

REDDING, CAL.

GENTLEMEN:—I would not take ten times the cost of **NOITOL** and be without it. It is, without exception, the finest application I have ever used in Eczema.

F. P. MITCHELL, M. D.

The Most Successful Remedy for

ECZEMA

AS ALSO

For Skin Diseases Generally.

Wheeler Chemical Works,

2 State Street, Chicago.

Jefferson Medical College

OF PHILADELPHIA.

New College Building and New Laboratories.

The Seventy-Ninth Annual Session will begin September 24th, 1903, and continue eight months. For four annual sessions the curriculum provides without extra fee: 1. Practical manual training in ten different laboratories recently fitted up at heavy cost. 2. Recitations by the faculty and others. 3 Didactic lectures and demonstrations in the commodious new buildings. 4. Clinics and bedside ward work in small groups at the College Hospital, beside the clinics given by the staff of the College at the Pennsylvania, Philadelphia, German, St. Joseph's and Municipal Hospitals. 5. Lying-in cases at the College Maternity.

A New Fire-Proof Hospital, with unrivalled facilities for clinical teaching, is now building at a cost of $700,000.

For circular and information, address **J. W. HOLLAND, Dean.**

University College of Medicine,

RICHMOND, VIRGINIA.

MEDICINE — DENTISTRY — PHARMACY.

Unity — — — — *therefore,* strong courses.
Concentration — *thereby,* strong teaching.
Method — — — *therefrom,* strong students.

CATALOGUE — 100 PAGES — ON APPLICATION.

Ad Infinitum.—(Dr. Dempwolff, of Berlin, announces that he found an aquatic insect which preys upon the anaphoeles mosquito. He is cultivating the creature artificially, with the expectation of destroying the mosquito and the most of germs which inhabit the body.)

They've found the bug
That eats the bug
That fights the bug
That bites us;
They've traced the germ
That kills the germ
That chews the germ
That smites us.

They know the bug
That knifes the bug
That stabs the bug
That jabs us;
They've seen the germ
That hates the germ
That biffs the germ
That nabs us;

They've struck the bug
That slays the bug
That flays the bug
That sticks us;
They've jailed the germ
That guides the germ
That taught the germ
To fix us.

But still these bugs—
Microbic thugs—
In spite of drugs
Combat us;
And still these germs—
Described in terms
Inspiring squirms—
Get at us!

—*W. D. Nesbit, in Life.*

Government by Majority.—"What's the matter, old boy?" asked a friend.

"Why, the fact is," said Paterfamilias, "I've just vetoed an Eastern appropriation, but the family has passed it unanimously over my head!"—*Puck.*

"THE KEY TO HEALTH."

Jackson Springs, Moore, N. C.

A health and pleasure resort conveniently located in the Long Leaf Pine section in Forth Carolina, where malaria and mosquitoes are unknown. The nights are cool, the ir pure and balmy. Hotel accommodations unsurpassed; hot and cold baths. Those eeking amusements will find up-to-date Golf Links, Tennis Court, Croquet Grounds, en-Pin Alley, etc. Transportation facilities first-class; telegraph and express offices onveniently l ocated.

Jackson Springs Water has long been used with excellent results in many chronic iseases, and is considered by all who have used it as a specific in dyspepsia and indigestion.

It increases the appetite, and enables the patient to digest all food taken without rouble or inconvenience in any way, thereby increasing the strength of the patient and roducing that condition of health so much desired. Catarrh of the liver, stomach or owels, where the organic changes have not been too extensive, is always benefited and iany times, most miraculously cured by the use of this water. In all cases of Cystitis, not ue to stone, Jackson Springs water relieves immediately, if taken properly, and will in hort time make a complete cure. Nervousness, when not due to some organic condition, s relieved at once by the use of this water, and especially is this the case when the ervousness is caused by over-work, indigestion and malassimulation. This water exercises n indisputable therapeuticial influence in chronic Bright's disease, patient at once gaining i strength with the power to take and digest food, and at the same time an analysis hows that the condition of the kidneys are improving.

In Renal Ca'culi, Gout, Rheumatism, Uric Acid, Dethearis, Anæmia, Sleeplessness, or rain fag, Jackson Springs water may safely trusted to relieve in a short time if taken roperly.

Hypernemia of the Liver, with its furred tongue, nausia, bilious, diarrhœa, sallow omplexion, headache, irritability, general feeling of depression, and malaise are very iccessfully treated by a course of Jackson Springs water.

This water possesses to a remarkable degree the power of effectively cleansing the owels, stimulating the liver and expelling poisonous matter which may have accumulated i the system, and thus giving the patient a new lease on life and making him feel like new man.

Children do well here, especially those who have recently suffered from bowel and omach troubles. Jackson Springs is an ideal resort for those patients convalesing from :cent sickness. The water is delightfully cool and refreshing, and can be taken in large iantities.

Analysis: Jackson Springs Water.

North Carolina Agricultural Department, Experiment Station.

NALYSIS No. 6,147. RALEIGH, N. C., Jan. 3, 1890.

Sir:—The sample of mineral water sent to the Station for analysis, in a demijohn arke dP. M. Wilson, contains on evaporation, per U. S. Gallon—

SOLIDS.

Sulphate of Potash	.577	grains
Sulphate of Soda	.263	"
Chloride of Soda	.825	"
Carbonate of Soda	.578	"
Carbonate of Lime	1.721	"
Carbonate of Magnesia	.833	"
Oxide of Iron and Aluminum	.181	"
Sodium Phosphate	Trace	
Silica	2.567	"
Total	7.546	"

Your obedient servant,

H. B. BATTLE, [Seal.]
Director

Dr. A. C. Bethune, resident physician, is located in hotel and will be pleased to send stimonials and give any other information desired.

For space and rates address

C. L. BAXTER, *Manager Jackson Springs Hotel,*

Jackson Springs, N. C.

When writing advertisers please mention this Journal.

The Hopkins
Compressed
Air Heaters

Electric Gas Alcohol

The Perfect Instrument for treatment of the ear with superheated air. Practically indestructible. Patented in all features. All kinds of special electric heaters for medical work. Write for booklet.

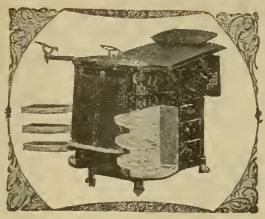
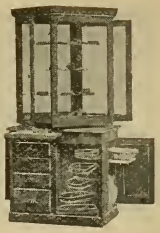
THE TERRY HEATER CO.,
Cleveland, Ohio.

Marvels of Radio-Activity.—The interest in the strange property possessed conspicuously by such substances as uranum, thorium and radium, of giving off spontaneously radiations that penetrate solid bodies and affect photographic plates, is kept at a high pitch by frequent new observations and discoveries. Prof. E. Rutherford, of McGill University, has enumerated three distinct types of radiation emanating from the substances in question. The first he calls the alpha (a) rays, which consists of flights of material particles, carrying a positive electric charge, and having a very high velocity; the second are the beta (b) rays, apparently the same as the cathode rays of ordinary vacuum tubes, but travelling faster; and the third, the gamma (r) rays, which are very similar to X-rays. In addition, some of the substances, as thorium, give off a fourth emanation, which appears to be matter in the gaseous state, and can be carried along by air streams. Thorium, from which all the radioactive constituent has been removed, will in a few weeks, yield as much as before.

The Way of It.—Tired Thompson: "Weary's got a nerve! He rushed right inter de Hoffman House an' ordered whiskey!"

Frayed Fagin: "Get it?"

Hired Thompson: "Sure! Dey thought he wuz some rich guy jest off an autermobile run!"—*Puck.*

A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your atients. Therefore, in the selection of your equipment you should exercise great care. 'he testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

re the best and are adapted to all lines of regular and special practice. They are superior workmanship and design, and include more conveniences than any other line on the narket. (Catalogue "A" fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

A Sanatorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

Beautifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

MAPLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &c.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents.

Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

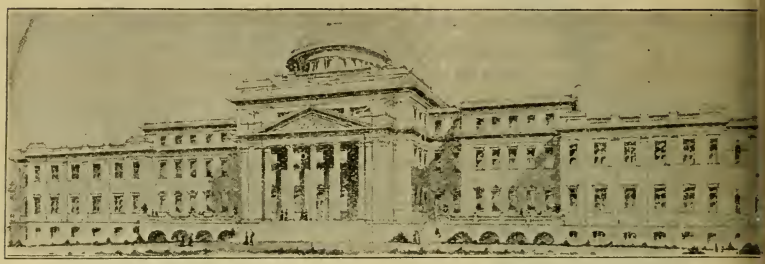
R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

When writing advertisers please mention this Journal.

Presbyterian College for Women....

Charlotte, N. C



Magnificent New Buildings. Every Essential of Health and Comfort. Good Fare. Experienced Teachers. Standard Advanced. Music and Art our Specialties. Charges lower than any other School of same grade in the South.

REV. J. R. BRIDGES, D. D., President.

IODO=VAPO

TRADE
(IODO-VAPO)
MARK

It is conceded that Iodoform is **unrivaled** as an antiseptic, the **one** objection to its use being its odor. Chemists in eliminating the characteristic odor of Iodoform have always eliminated Iodoform. We have, in Iodo-Vapo, Iodoform mixed with other valuable and bland antiseptics in such proportions that the iodoform odor is completely disguised. This compound has proven itself to be almost a specific in treatment of **Catarrh** of the **Air Passages.** It is applied by means of any good nebulizer. To prove the truth of our statement we will send to any licensed physician in the United State one full size bottle.

Simply drop a postal and watch the result.

HARGRAVE CHEMICAL CO.,

WILSON, N. C.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

A Natural Mineral Water Remedy in Concentrated Form.

Echols' Piedmont Concentrated Iron and Alum Water

Is now being prescribed by physicians all over this country, and unless we knew it would stand the most severe test, your attention would not be called to it in this Journal.

We have seen our remedy cure so many Chronic Diseases after the methods usually employed had failed, that we now guarantee satisfactory results after a fair trial.

We can send you testimonials that mean something from both prominent physicians and people you know.

The analysis of the Concentrated Water is nearly identical with that of a healthy human system, and we think this alone should be sufficient to commend it to any physician.

Such diseases as Indigestion, Rheumatism, Catarrh, Female Complaints, Kidney and Bladder Troubles, Nervousness, Torpid Liver, Stomach and Bowel Disorders, Scrofula and Blood Troubles are successfully treated with Concentrated Water, and we will send an 18-oz. bottle of same (equal to 25 gallons of Natural Water) free of cost to any physician wishing to test it.

For sale by druggists. 8-oz. bottles 50 cents. 18-oz. bottles $1.00.

J. M. ECHOLS COMPANY, - - LYNCHBURG, VIRGINIA.

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED IN 1881—OPENED IN 1882.

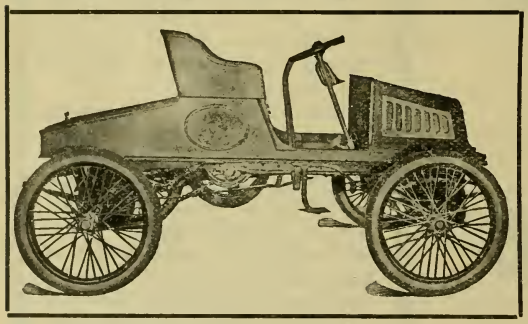
The New York Polyclinic is a school for teaching graduates the most recent methods of diagnosis and treatment in every department of medicine. The clinical material is abundant, and the hospital wards adjoin the lecture rooms. Since the fire in 1896, a new building has been erected and thoroughly equipped, and the Institution is now prepared to offer better facilities than ever. Students may enter at any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James P. Tuttle, M. D.; John A. Wyeth, M. D.
MEDICINE—Isaac Adler, M. D.; Morris Manges, M. D.; W. H. Katzenbach, M. D.; J. D. Nisbet, M. D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt. H. Wylie, M. D.; Brooks H. Wells, M. D.; W. Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—August Seibert, M. D.
DERMATOLOGY—Edward B Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O. Born, M. D.; W. E. Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M. D.; Robert C. Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederich Whiting, M. D.
EUROLOGY—B. Sachs, M. D.
OBSTETRICE—Edward A. Ayers, M. D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York

THE "ZENTMOBILE"



Where quality is desired, where comfort, durability and genuine pleasure is demanded in an automobile, this machine should be investigated before ordering.

We are all after results in an automobile, as well as everything else, and the best results are only obtained by years of persistent experimenting. We have passed through this stage. Don't buy an experiment. Get something that will require the least attention. It is a "ZENTMOBILE." - - - Get price and full particulars.

SINGLE CENTRE BUGGY COMPANY, Evansville, Indiana.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

Keep Posted on the

PHARMACEUTICAL BAYER PRODUCTS

ARISTOCHIN

Quinine Divested of its Disadvantages.

CITARIN

The Anti-Lithemic.

HEDONAL

The Promoter of Natural Sleep.

THEOCIN and AGURIN

The Most Powerful Diuretics.

PROTARGOL

The Best Substitute for Silver Nitrate.

HELMITOL

The Urinary Antiseptic, Analgesic.

SAMPLES AND LITERATURE SUPPLIED BY

FARBENFABRIKEN of ELBERFELD CO.

P. O. BOX 2160. NEW YORK. 40 STONE ST.

MELLIN'S INFANTS' FOOD

Mellin's Food babies have pink cheeks, bright eyes, sound teeth, strong limbs and firm flesh.

Our book, "The Home Modification of Cow's Milk," sent to physicians free upon request.

Mellin's Food Co. : : : Boston, Mass.

Physicians

are prescribing

Glyco - Heroin - (Smith)

with

Unexampled and perfect satisfaction —in—

———

In therapeutic qualities and physical characteristics, Glyco-Heroin-(Smith) presents the highest progress of Medicine in the treatment of these diseases.

Coughs

Phthisis

Bronchitis

Pertussis

Laryngitis

Pneumonia

Asthma

—— *NOTE* ——

Glyco-Heroin-(Smith) is supplied to the druggist in sixteen ounce dispensing bottl only. The quantity ordinarily prescribed by the physician is two, three or four ounce

—— *DOSE* ——

The adult dose of Glyco-Heroin-(Smith) is one teaspoonful, repeated every two hours or at longer intervals as the case may require.
Children of ten or more years, from a quarter to a half teaspoonful.
Children of three years or more, five to ten drops.

Sample and literature free upon application.

MARTIN H. SMITH CO.,
New York, N. Y.

SOLE BRITISH AGENTS:
THOMAS CHRISTY & CO
London, E. C.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions.

BROADOAKS SANATORIUM.

ISAAC M. TAYLOR, M. D.

Morganton, North Carolina.

A Private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

RIO

Women suffering from an Aching Back, Bearing Down Abdominal Pains, or any abnormal condition of the Uterine system, should be given ALETRIS CORDIAL RIO in teaspoonful doses four times a day.

Rio Chemical Co., New York.

St. Luke's Hospital,

1000 West Grace St.,

RICHMOND, VIRGINIA.

Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,

RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.

When writing advertisers please mention this Journal.

AS The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our

. . . regular eleven-ounce hexagonal bottle, . . .

you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

SURGICAL SHOCK

is reduced to a minimum by high rectal injections of ***BOVININE*** combined with an equal quantity of salt solution to render absorption more rapid. It should be heated to 70°F, and administered prior to, during, and subsequent to operation. The quantity should be suited to the individual case, varying from two to six ounces of each.

Bovinine

improves the heart action and circulation at once; its sustaining effect is continuous for two to three hours.

The blood which has become non-aerated through ether administration is oxygenated by the introduction of a fresh supply, and is rapidly restored to normal condition. To this fact is due the power of ***BOVININE*** to prevent the thirst, nausea, and emesis, which usually follow anæsthesia.

Its wonderfully nourishing, supporting, and healing properties render it a necessary adjunct to the operating room.

Reports of numerous cases are cited in our scientific treatise on Hæmatherapy. It is yours for the asking.

The Bovinine Company,

75 West Houston Street, NEW YORK.

When writing advertisers please mention this Journal.

PEACOCK'S BROMIDES

PURITY

THE BEST IS THE CHEAPEST

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.
DOSE:
One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day. OD CHEM. CO., NEW YORK.

A Bath for Beauty and Health.

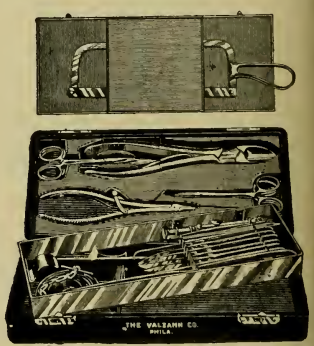
Allen's Fountain Brush and Bath Outfit

Friction, Shower and Massage Combined. The only Sanitary Bath Brush that at one operation thoroughly cleanses the skin, imparting a healthy tone and glow, and puts one in a condition to resist colds, la-grippe and all contagious and infectious diseases. Furnished either for bath tub connection, or with our fountain and Safety Portable Floor Mat. Enabling one to take a perfect spray and frictional bath in any room. With this outfit one is independent of the bath room, as a better bath can be taken with two quarts of water, than with a tub-full the old way. Insures a clear complexion, bright eyes, rosy cheeks, cheerful spirits, sound sleep. Should be in every home, and every travelers trunk or grip. Full outfit No. 2, consisting of Fountain Brush; combination rubber hot water bag; bath fountain and syringe and safety mat. Price $5.50.

Agents are making from $25 to $75 per week selling these outfits. Send for FREE booklet, "The Science of the Bath," prices and terms.

THE ALLEN MANUFACTURING CO., 429 Erie St., Toledo, O.

Valzahn Co.'s Amputating and Trephining Case.



Contents—1 Amputating Knife, 1 Scalpel, 1 Finger Knife, 1 Tenatome, 1 Curved Sharp Bistury, 1 Curved Blunt Bistury, 1 Tenaculum, 1 Grooved Director, 1 Pair Probes, 1 Trephine, 1 Tourniquet, 1 Dressing Forcep, 1 Amputating Saw, 1 Bone Forcep, 1 Needle Holder, 1 Straight Scissor, 1 Curved Scissor, 2 Pean's Haemostatic Forceps, 2 Tait's Haemostatic Forceps, 6 Needles, 1 Card Silk, 1 Coil Silver Wire, 1 Coil Catgut. All in fine Leather Case, $17.00. Knives are in Aluminum Rack removable to facilitate sterilization. **The Valzahn Company,** Manufacturers and Importers of Surgical Implements and Hospital Supplies, 132 South 11th Street, Philadelphia, Pa.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

ANTIPHLOGISTINE

Embraces by far the largest and most important field of curative therapeutics of any preparation known to the medical profession. This is a strong statement, true, but Antiphlogistine

HAS

Demonstrated to the best clinicians the world over, its decided value in relieving inflammation of the superficial and deep structures.

A

Medication which assures results to the practitioner, economizing the patient's energy and finance, cannot fail to hold its permanent and praiseworthy reputation.

In every instance it is of the utmost importance that Antiphlogistine be applied warm and thick and covered with absorbent cotton and a compress.

Synovitis, Bruises and Sprains readily recover under the protecting and aiding influence of Antiphlogistine. In deep-seated inflammations of the thoracic and abdominal viscera, Antiphlogistine has the

REPUTATION

Of rendering effective relief, very often aborting a serious termination by immediate resolution.

For convenience Antiphlogistine is marketed in four sizes only—Small, Medium, Large and Hospital—never in bulk. To insure economy and the best results always order a full package and specify the size required.

The Denver Chemical Mfg. Co.

DENVER LONDON NEW YORK

"No physician can afford to be indifferent regarding accurate filling of his prescriptions.

The Passing Clouds

A Small Volume of Facts and Romance by DR. D. S. MORRILL.

¶ Issued by the Franklyn Publishing Co., of Atlanta, Ga., and mailed by them on receipt of price, $1 00.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.
Dr. W. F. Goldsmith, General Surgery.
Dr. C. C. Stockard, General Medicine and Drug Habits.
Dr. S. G. C. Pinckney, Nervous Diseases.
Dr. J. M. Crawford, Eye, Ear, Nose and Throat.
Dr. Michael Hoke, Orthopoedic Surgery.
Dr. E. C. Davis, General Surgery.
Dr. W. Munroe Smith, General Surgery.
Dr. M. A. Purse, Children's Diseases.
Dr. W. L. Champion, Genito-Urinary Diseases.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

17 W. Cain Street, Atlanta, Ga.

Table of Contents.

PAGE

ITORIAL:
- Organization of County Medical Societies in North Carolina ... 551
- The Throat Affection of the German Emperor ... 551
- The Profession's Influence With the Public ... 552
- Political and Professional Ethics ... 554
- Conservatism in Medicine and Surgery ... 557

IGINAL COMMUNICATIONS:
- Hookworm Disease: C. A. Julian, B. S., M. D. ... 559
- The Influence of Alcohol in Heredity: A W. Moye, M. D. ... 563
- How to Prevent Malaria: Hugh B. Hoyle, M D. ... 565
- Some Mistakes of a Country Doctor—Third Paper: By One of Them ... 566

STRACTS ... 570

INICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL ... 572

RTH CAROLINA COUNTY MEDICAL SOCIETIES ... 574

OK REVIEWS ... 576

LECTIONS FROM OUR EXCHANGES ... 578

WER MATERIA MEDICA ... 580

ERAPEUTIC HINTS ... 588

DICAL NEWS AND ITEMS ... 598

Hagee's Cordial Cod Liver Oil Comp,

Tonic, Alterative, Stimulant, Nutritive, Reconstructive, Digestive.

Causes rapid accumulation of flesh and strength, gives tone to the functions of assimilation and secretion, promotes metabolic changes, encourages healthy cell action and excretion.

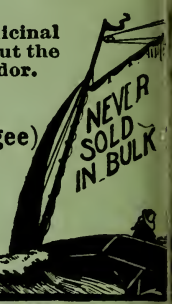
HAGEE'S CORDIAL contains all the medicinal principles of pure Norwegian Cod Liver Oil without the grease. No decomposed liver tissue. No fishy odor. No eructation. Formula on every bottle.

PRESCRIBE

Cord. Ol. Morrhuae Comp. (Hagee)

and your patients will take it.

Put up in 16 oz. bottles only.



KATHARMON CHEMICAL CO.

St. Louis, Mo.

Index to Advertisers.

	PAGE
Fairchild Bros. & Foster .....Cover	1
Parke, Davis & Co. ..... "	1
Lambert Pharmacal Co..... "	2
Mr. Fellows..... "	3
Manhattan Eye Salve Co. .. ... "	4
Glycosine Phosphate Co ..... "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.	1
Martin H. Smith Co	2
Broadoaks Sanatorium.....	3
Rio Chemical Co.	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.....	5
Peacock Chemical Co	6
Od Chemical Co.....	6
Allen Mfg Co.....	6
The Valzahn Co.....	6
Denver Chemical Mfg. Co.....	7
Sharp & Dohme.....	8
Franklyn Publishing Co.	9
The Halcyon Retreat.....	9
Katharmon Chemical Co	10
Mariani & Co.....	11
The Antikamnia Chemical Co.....	11
Oakland Chemical Co.	12
Battle & Co.	12
Kress & Owen Co.	13
The Purdue Frederick Co.....	14
Dr. Crowell's Private Sanitarium....	14
Wm. R. Warner & Co.	587
Charles N. Crittenton Co.....	589
H. K. Mulford Co.....	591

	PAG
Leukretol Chemical Co.	5
The Abbott Alkaloidal Co.....	5
A. M Ake	5
Invalids Table Co.	5
The Keeley Institute.....	5
Dad Chemical Co.....	5
The Tilden Co.....	5
Continental Plant Co	5
Chattanooga Medical College	5
University of Maryland.....	5
University of Virginia.....	5
College of Phys. and Surg. of Balto.	5
Memphis Engraving Co..	6
The Presbyterian Hospital...	6
Sultan Drug Co.	6
The Mathewson Laboratory.	6
Robinson-Pettet Co.	6
The Botanic Drug Co.....	6
The Fairbanks Co.....	6
Wheeler Chemical Works	6
Jefferson Medical College.....	6
University College of Medicine.....	6
Vapo-Cresolene Co	6
The Terry Heater Co	6
W. D. Allison Co.....	6
Maplewood Sanatorium.....	6
Munn & Co.....	6
R. L. Polk & Co.....	6
Hargrave Chemical Co.	6
Presbyterian College for Women	6
J. M. Echols Co.	6
N. Y. Poly. Med. School and Hospital	6
Single Centre Buggy Co.....	6

Written Endorsements From More Than 8000 Physicians.

VIN MARIANI INTRODUCED NEARLY HALF A CENTURY AGO

"The Preparation which made Coca known as a remedy!"

Priority, Facilities and Processes of Manufacture

MAINTAIN MARIANI COCA PREPARATIONS INIMITABLE.

AVOID "COCA WINES" Extemporaneously made with **Cheap Wine and Cocaine.** Substitutes harm Patient and Physician and betray confidence in the unique properties of Coca.

VIN MARIANI

Represents TRUE COCA with a Sound Nutritious FRENCH WINE;

An Adjuvant to all other Remedies in

Convalescence — Wasting Diseases — Neurasthenia

And Allied Conditions from any cause.

THE COCA LEAF

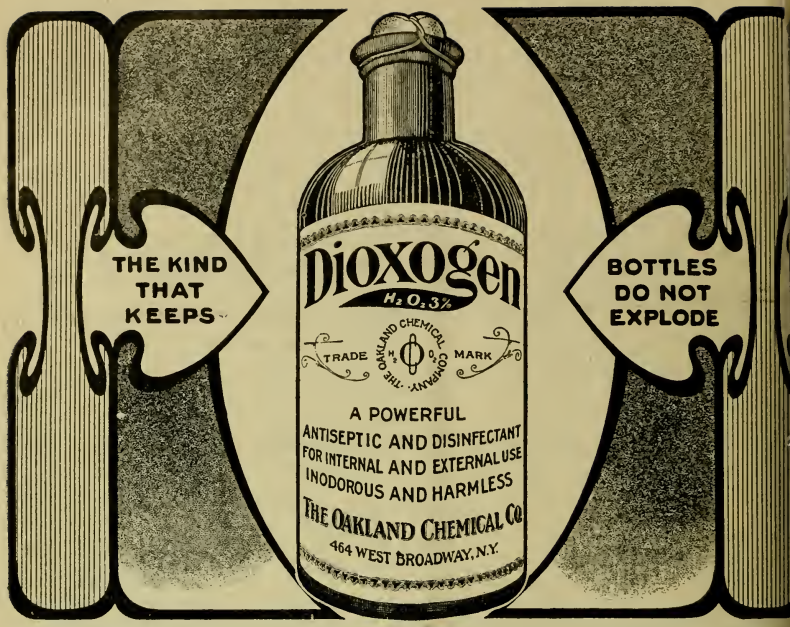
A PERIODICAL ADVOCATING THE RATIONAL USES OF COCA MAILED FREE TO PHYSICIANS ON REQUEST.

Inquiries from Physicians Receive Ethical Consideration.

MARIANI & CO.,

52 West 15th Street, New York.

PARIS, LONDON, BERLIN, MONTREAL. Laboratories: Neuilly Sur-Seine, FRANCE



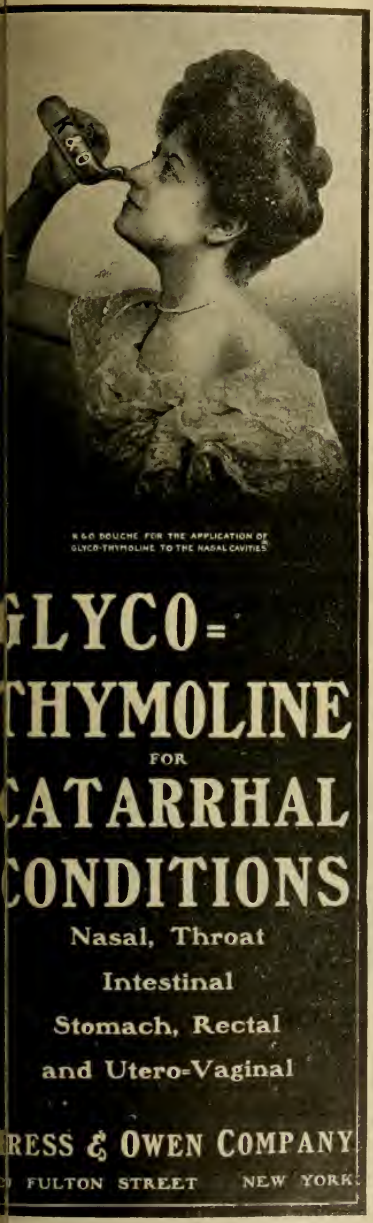
BROMIDIA IS A REST-MAKER FOR RESTLESSNESS. IT GIVES CONSISTENT NERVE REST. IT DOES NOT LESSEN THE SUPPLY OF BLOOD TO ANY ORGAN OF THE ECONOMY, AS THE BROMIDES ARE SURE TO DO. IT IS A HYPNOTIC.

FORMULA:--15 grains each Chloral Hydrate and Purified Brom. Pot. and 1-8 grain each Cen. Imp. Ext. Cannabis Ind. and Hyoscyamus to each fld. drachm.

ECTHOL
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U. S. A.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."



Clinical Notes.

Hemorrhage From Lungs.—For obstinate bleeding from lungs, use half-drop doses of a one per cent. alcoholic solution of nitro-glycerine in water, and repeat every half hour.

Hemorrhage From Nose. — Nasal hemorrhage can be stopped by spraying the cavity with very hot vaseline. Oil of turpentine makes a splendid application in capilliary oozing.

Persistent Vomiting. — When you have tried everything you can think of to stop vomiting, give nitro-glycerine a trial. It is also good in some cases of *post-partum* hemorrhage and in obstinate hiccoughs.

Acute Tonsillitis.—Applications of guaiacol to the tonsils will abort an attack of tonsillitis. At same time give sulphide of calcium to saturation.

Recurrent Neuralgia.—For neuralgia which keeps coming back, give ten grains of chloride of ammonia, with one-hundred-and-twentieth-grain atrophine every four hours. This will generally break it up for good.

Aphonia.—Dr. Bartholow states that the loss of voice from fatigue or simple laryngitis is relieved by small doses of nitric acid well diluted and given every two hours.

Vegetations on Genitals.—For the removal of vegetation from the external genitals, salicylic acid is an excellent remedy. Half a dram should be dissolved in an ounce of acetic acid and applied to parts with a camel's hair bush.

Hay Fever.—For hay fever caffeine is, in many cases, the most useful remedy you can employ. Granules containing one-sixth grain may be given at short intervals until you get the effect you want.

For Burns.—For burns dissolve seventy grains of picric acid in two ounces of alcohol, and add a quart of water. Apply.

THERE IS NO OTHER

reason for the conservative scientific physicians' unqualified endorsement and extensive employment of

GRAY'S Glycerine TONIC Comp

than the simple fact of intrinsic merit. It yields incomparable results in general debility, anæmia, malnutrition and nervous exhaustion.

THE PURDUE FREDERICK CO.,
No. 15 Murray Street, New York

Dr. Crowell's Private Sanitarium

FOR THE TREATMENT OF

Alcohol, Tobacco and Drug Addiction

Special Apartments and
Nurses for Lady Patients.

S. M. CROWELL, M. D., Medical Director, 10 N. Church St., Charlotte, N.

"No physician can afford to be indifferent regarding accurate filling of his prescriptio

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLIX. CHARLOTTE, N. C., NOVEMBER, 1903. No. 11

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

Subscription $1.00 per year, in advance.
Subscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
Receipts. The receipt of all money is immediately acknowledged.
Important Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it continued expecting to receive a remittance at their earliest convenience.
We Notify all subscribers when their paid subscription expires.

EDITORIAL.

ORGANIZATION OF COUNTY MEDICAL SOCIETIES IN NORTH CAROLINA.

At the fifteenth annual session of the State Medical Society, in Hot Springs, last June, the new constitution was adopted, making the County Medical Society the basis of the State organization and a definite plan set on foot for the bettering of the condition of the profession.

How well the work is progressing can best be told by a reference to the long list below of county societies organized as component branches of the State society, up to November 10, 1903.

It is a splendid tribute to the faith of the men who had confidence in the plan of carrying the membership privileges of the State Medical Society to the homes of the doctors throughout the State and making every legal practitioner of medicine in the State, who affiliates with his local county society, a member of the State society as well.

The idea was wisely conceived and in its fruition will undoubtedly redound greatly to the upbuilding of the prestage of the profession in general, as well as giving to the individual doctor a pleasant contact with his fellow doctors at intervals which can but be beneficial.

We congratulate the officers and council of the State society and would urge upon every member and officer of a county society the duty of making an earnest effort to enroll upon the lists every legal pactitioner of each county. So far as our information goes, in the counties organized to date, almost without exception, every man eligible has been enrolled.

THE THROAT AFFECTION OF THE GERMAN EMPEROR.

The removal of a polypus from the left vocal cord of the Emperor of Germany has created world wide interest. It will be remembered that his father, the late Emperor Frederick, while yet crown prince, developed a polyp on some part of the larynx, and that Virchow declared, at the time the operation was performed for the removal of the polyp, that the disease was entirely

devoid of any cancerous tendency, and yet death resulted from cancer in about a year. The mother and an uncle of the present Emperor have both died of cancer, hence from the side of heredity the prospects are against the patient. From all accounts, the polyp was pedunculated, rendering its removal by the snare an easy matter. The base was afterwards cauterized by electric cautery, and the latest reports indicate satisfactory healing. The microscopic examination of the tumor shows it to be myxomatous in character, but a superficial epithetial growth, in a person of susceptible age with a family history against him, cannot but cause anxious concern. If the growth was *all* removed at the *first* operation and if healing has been rapid and complete, the chances are in favor of complete recovery. As we see the merits of the case, months must elapse before all anxiety can be allayed regarding a possible development of a more serious nature at the seat of the wound. The New York *Medical Journal* has received the following cable message from Berlin:

"The clinical details are too meagre for dogmatism, but the report of the medical advisors is very clear that in the piece removed nothing justifies a suspicion of malignancy. Orth would have expressed himself more guardedly and would not have spoken of the growth as benign, if he had had the least doubt. Schmidt is the surgeon who pronounced the late Emperor Frederick's condition cancerous, and he would certainly not have operated upon Emperor William without consulting other advisers, if he had not felt certain the growth was innocent. The family history must cause anxiety, but the medical opinion is clearly favorable."

THE PROFESSION'S INFUENC WITH THE PUBLIC.

In an editorial of the JOURNAL i August, the importance of organizati of the profession was dwelt upon. O of the benefits to be derived from thorough organization is an increas prestige with the public—to put it pla ly and in strong language, to impro the standing of the doctor with the pu lic. It is evident that the position the medical profession, as a whole, the two Carolinas, and, we might s in the United States, is not what should be.

This subject was very ably discuss in the medical journals several yea since, but the remedy for the evil w not found, or if found, was not applie for what was true of the conditions e isting at that time is evident now.

The profession does not hold the p sition in society and State that it shoul Its influence is not felt. Individual ph sicians may, and often do, exert an i fluence adequate to the demands of t positions in which they are placed. T faculty in special localities or towns occasionally well thought of, but it not general. As a class, the professi does not wield the power or its opi ions carry the weight of authority e sential to a commanding position.

The true physician is a useful men ber of society, second in imporance on to the minister of the Gospel. By h education, his attainments, his soci status he is prepared to assume a hig place in public life. His views shoul be heard and his opinions carry weigl in progressive movements of ever kind. The necessities of his work d mand close investigation of matte coming to his attention, and h is a judicial mind, weighing all que

ons for cause and effect, so his judg-ient should not be at haphazard, but on well informed basis. This is especial-y true of matters pertaining to public ealth, hygiene and kindred subjects nd the statutory laws relating thereto. 'et, it is a fact that in the making of ws relating to the profession, he has ut little voice; before the courts and ries of the country he has no reputa-on; and his position with the masses one of subordinance.

Until the cause for this state of af-irs is fully recognized, it will be hard apply a remedy to meet it. Whether e blame lies with public is a question be considered. It is said that the orld thinks as well of a man as he de-erves. This may not be all truth as ap-lied to a profession or class, but it is ounded upon a good basis. To admit as truth would be, logically, a confes-ion that the profession occupies with e public the position it ought to hold, nd this we are not prepared to con-ede.

The slogan of the day is progress—nergy personified. It is a race—in-ense and strenuous, and the goal is ealth—riches, money. It is an age of chemes, artifices, policies, strategy, all secure the dollars, and if the doctors ndividuality, his character, his brain, is ability or his profession does not in me way advance interest in securing uccess, he is pushed aside.

All the cause, if any of it, cannot be id at the door of the public, for the reater part, if not all of our troubles e at our own doors, and are of our own aking. We have not fully realized the nportance of the changed condition of ffairs, and are not keeping in touch ith the spirit of the age in our social fe or in connection with the public. n the purely scientific work there never as a time of more progress in all the departments of medicine, more research, more improvement and better equipment for the great work of combating disease.

Of this and for this we have reason to be proud and cause for congratulation. The medical profession as a scientific body, is not one whit behind in this great era of progressive thought. The profession has kept pace with the world in its scientific pursuits, but in this work it has overlooked some details that would add to its influence, make the achievements more effective and possibly more remunerative to the profession.

This is an age of concentration, of centralization. Labor is organized into unions; capital is formed into trusts; transportation companies are pooled with communities of interests; the news of the day is gathered and sold by agencies; the manufacturing enterprises are merged into corporations; syndicates control industries of all kinds; merchants are combined into protective associations.

The medical profession is not so organized. In nearly all the States of the Union, possibly all, there is a State Medical Society. Various specialties of the profession have associations for mutual benefit, and the American Medical Association is a representative body of the profession in the nation. Generally a few leading spirits in each organization control and direct its affairs, and there is not that harmonious action in them essential to the well being of the profession at large, nor do enough of the individual members of the profession affiliate with these organizations to make them effective as a source of influence. They all have a purpose, and they all do good in a measure. There are excellent reasons for the existence of many of them, but none of them ex-

ert an influence with the public of an authoritative character. This may be from the nature of the organization, the character of the leadership, or the apathy of the profession in not using the means presented for its benefit, the last mentioned probably carrying the greatest weight.

Commercialism in the profession in its various forms, has been written of much in the past two decades, and much that has been written was timely. The doctor should be compensated for his labors and with all the advice given, he is yet the most poorly paid of any class, for the amount of labor, mental and physical, performed. The position taken by the extreme advocates of commercialism, that the profession of medicine should be considered a trade rather than a profession; that the doctor has so much science, so much brain, so much knowledge of the human frame and its ills that he offers for sale, will not be discussed in this connection. It is a question if, in the desire to improve the material condition, the profession has not sacrificed the birthright once enjoyed, but now no longer claimed—sold for a mess of pottage.

No State, no society, no organization can rise above the individual. It is what its component membership is. Each and every constituent adds to or detracts from the character of the body politic. Its position is determined by the nature and qualities of its integral parts. If the profession was considered in the light of its truest, brightest members as exponents of its principles, it could or should be satisfied; but this is not the case, for there is a tendency in human nature to visit the shortcomings of one member of a profession upon the whole as a class. So when a doctor forgets the position he holds in society; when by his private or professional conduct he lowers the digni of his profession; when he no long sustains the reputation of being one a learned profession, he brings disr pute to himself, and a reflection upc the whole profession.

These are not all the causes for th state of affairs under discussion, bu they are the principal ones. The ren edy lies in a more compact and tho ough organization of the professic and the observance of a higher stan ard of ethics by its membership. Th enforcement of the latter is impossib without the former.

POLITICAL AND PROFESSIONA ETHICS.

Dr. James D. Love read an interes ing paper on this subject before th Florida Medical Association (*Journ American Medical Association*) takin some very strong grounds, the majorit of which all can fully endorse.

Every physician owes a debt to th profession of which he is a membe The moral and intellectual qualities o the profession gives a position that th young doctor inherits on the threshol of his career:

"The physician who wilfully devote his entire efforts to his patients or to hi family, who isolates himself from hi fellow practitioners, who neglects hi political and social duties, who contrib utes no assistance to medical societie and whose life is spent in his patient' behalf and his own self-aggrandize ment, no matter how conscientious ar his efforts and how honest his inten tions, is not only remiss in the discharg of his entire professional obligation, bu his narrow existence has unfitted hin for the discharge of some of the mos sacred duties he owes his fellow man When he fails to exert his influence fo the elevation of his profession and fo

creasing its sphere of usefulness, he n not excuse his course with the plea at the demands made on him by his tients are paramount in importance the duty he owes his profession. For who persistently adheres to this nar- w course, who never looks beyond e horizon of his own private needs, feats ultimately his own ends by les- ning his influence in his immediate here."

The public resents doctors meddling ith politics as politicians. No law has en passed by the Florida Legislature r possibly any other legislature—Ed.) the instigation of the profession, but hat is more beneficial to the public an to the doctor, yet our efforts in the rection of legislation are viewed with spicion, and fail because of the sordid otives attributed to us.

The physician is a component part of e community, and his chief reward in otecting the public is from humane d altruistic motives which are not ap- eciated.

The populace is prejudiced against ncert of action on the part of physi- ans:

"Compare this prejudice to medical ganizations with the general approval th which our commercial bodies are garded, and the result of such com- rison is almost disheartening. If a ard of trade endorses certain legisla- ve enactments for the protection of e financial interests of a community, e masses of the pepole have sufficient nfidence in the integrity of this board wisely rely on and be governed by eir endorsement. The press will come their assistance and, if need be, a nd is created for the promotion of the terprise.

"Let a medical organization, on the her hand, originate or endorse meas- es which have a vital bearing on the alth of the same community, and to whom will it look for support? The press in certain instances is subsidized by advertising charlatans, and the people, instead of according us their moral support, are either indifferent to our efforts in their behalf or are ready to rise in denunciation of our most honest purposes. The same confidence that is accorded us as individuals is denied us as an organization. Probably this is because the people, not being aware of their needs, resent as an interference any unsolicited or unrewarded action in this direction; for as concerns other matters of even less importance where the physician's assistance and council is solicited and remunerated, he must needs feel complimented and gratified over the confidence that is reposed in his integrity, ability and veracity. Courts of justice are guided or influenced by our expert testimony, even when the very life and liberty of people are at stake. Civil and military authorities rely implicitly on our statements and opinions, and there is a liberal and generous spirit manifested toward our individual efforts which renders it remarkable that our concerted political influence is so limited. I believe that little has ever been accomplished by the mere adoption of resolutions by medical organizations; and, on the contrary, I believe that the influence we as individuals might exert politically is practically unlimited. And when we note that through defective or unjust legislation our professional institutions are endangered, it becomes as much our duty to exert our political influence as to protect from violation the sanctity of our homes."

We need to educate, by individual efforts, our patients to the needs of the profession. It is here we can exert the most influence and accomplish more for the profession.

The legislatures are unjust to the

medical profession in requiring an examination as to fitness to practice, while quacks and charlatans, under the guise of mental healers, osteopaths and Eddyites are allowed to treat any disease within the domains of medicine or surgery, with no restrictions as to qualifications.

In the sale of patent nostrums and any efforts to prevent it, the profession is handicapped because its motives are misunderstood. While the opposition to the profession's views is strong, being composed of governors, legislators and the press of the land, it is a duty the profession owes to the public to make some personal sacrifice to stem the tide of this growing evil.

"I protest against the assistance that is accorded quackery by the entire press of the country. I believe that with a very few exceptions newspapers throughout this land will lend their advertising columns to the teaching of doctrines known to be false and for the promotion of the sale of drugs and appliances that are only intended to be used for criminal purposes. Men who are recognized and admitted to be quacks and imposters can, for the slightest compensation, secure the co-operation of and completely subsidize our press for the purpose of defrauding the public, and thus endanger the health and life of a community. That through the medium of the press charlatanry thrives is best evidenced by the fact that as a business proposition the efficacy of newspaper advertisement is recognized by quacks and their patronage continues unabated. Abortifacients of all kinds are daily brought to the attention of the public through the medium of the press; and when a paper knowingly advertises any drug or measure which on the face of it has for its purpose the accomplishment of a crime, judged from every law of morals, the proprietor of that paper is guilty of complicity in crime. That they salve their consciences and excuse their complicity by disowning responsibility for the results of what they term legitimate business, is but a puerile plea and is an admission on their part that for a monetary consideration the columns of the paper are open for any frudulent accomplishment that is without the pale of the law. If the physician in his practice should advocate the employment of the drugs that are with full license advertised in our press, it would be regarded as not only a violation of our statute, but of a higher ethical and moral law as well. What the physician can not and would not do is with impunity accomplished through the advertising columns of our papers; and though it is well understood that death is a frequent result of this disgraceful newspaper complicity, their columns continue to reek with this criminal vile obscene and noxious effluvium. The efforts and teachings of a hundred thousand physicians are set at naught by this pernicious practice, and yet it continues unabated. The responsibility is saddled on the ignorant people and the demoralizing and often sad spectacle which we as medical men witness as a result of this disgusting abuse, is set aside by the newspaper proprietor as something aside from his province and unpleasant to contemplate."

The obligations of the doctor to his society and conferes is paramount to all other considerations. His highest praise and the sweetest comes from the well earned and cheerfully given commendations of his professional brethren and not from the plaudits of the public.

There are most respectable citizens in our profession who are not members of our medical societies and whose

anding among medical men is not hat it should be, yet these men have in iem all those elements which go to iaking reputable physicians. We owe to our profession to use our utmost ndeavor to induce these men to aban- on their selfish and isolated course nd to identify themselves with our as- ociation. There would be a mutual rofit that would ensue to all in conse- uence of this, and a fraternal commun- n with men of exalted ethical princi- les would make of these men useful nd honorable members of our body. Vith an increased knowledge of their ellow workers and increased appreci- on of the commendable purposes of ur association, they would become bet- r men and better physicians and, "like ie stained web that whitens in the sun, row pure by being purely shone upon."

In improving the tone of our profes- on we advance our material interests y proving to the public our worthiness f their trust and confidence. Merit nd genuine worth will not long remain nrecognized and our only hope for a ull recognition of our political require- ients is based on a strict observance of rofessional ethics.

ONSERVATISM IN MEDICINE AND SURGERY.

Beverly Roberson (*Med. Record,* ept. 26th) makes a plea before the lew York Practitioners' Society for ld remedies and conservative surgery n many operations. Many operations of he day cannot be justified—being ex- erimentative, without hope of bene- ting the patient—"a therapeutic er- or." Trevis, of England, and Hare, f Philadelphia, have written of the in- iscriminate operating for appendicitis. 'hese views are supported by Richard- on and Hernmuter in his work on "Diseases of the Intestines." There seems to be a lust for operating, and examples might be given to prove that what appears advancement in surgery is only too great hardiness, or ignorance of the purposes of this noble art.

Still surgery is accomplishing things glorious and sure to endure, notably cases of deep-seated pus in cavities, muscles, bone or cellular tissue. We are prepared to grant the immense triumphs of modern surgery, thanks to asepticism and perfect drainage. We only become sceptical and inclined to criticise and upbraid when through the very impunity which skill and opportunity afford, it shows a subservience to these factors, when, with a wider knowledge and appreciation of general laws which govern disease, surgeons would abandon operations which are useless or dangerous, or, perhaps, while involving only sight risk, may be followed sooner or later by consequences more lamentable than the original disturbance of organ or of health from which the patient primarily suffered.

The modern treatment of fever by antiseptics principally, is often fraught with danger. We formerly treated fever as a symptom. If the cause is known the treatment should be to remove it, not always easily accomplished. The pyrexia itself is to be treated only when it reaches a degree that threatens life if continued or parenchymatous changes or muscles and nerves. The coal tar derivatives should not be used indiscriminately to the exclusion of such old time and well-tried remedies as spirit of mindererus, spirits of niter and aconite. Cold water as an atipyretic has accomplished wonders, but when . . . we attempt to use it to control or throttle as it were, the march of a pronounced or typhoid infection,

we have gone too far, and we have lost sight of great principles of medicine, long recognized.

Cinchona, arsenic and coco were made known to us by empyricism, and their utility is great, but the use of the alkaloids and their application to so many diseases has been a disadvantage. The old time castor oil plant does more in keeping the bowels sweet and fluent than any other remedy known.

The use of antiseptics and disinfectants is general, and in their places are some times beneficial, but often worthless. The utility of many of them may be attributed to other action than that of antisepsis.

Great additions to our means of combatting and preventing disease have been made by the searcher after truth in the solid workers of the day, the results of which are only partly realized as yet. This work is to be commended, but in it we are not to forget that many diseases are self limited.

All germs are not destroyers, some are protective—some are inoffensive. Whilst many diseases are of microbic origin, in others the microbic origin is unproven.

We anticipate much from the investigations now being made on the subject of immunity from disease, why certain people do not take certain diseases at all and why this immunity is often influenced by conditions of bodily vigor.

In speaking on immunity, Professor Wm. H. Welch says: (*Lancet*, October 11, 1902, p. 983.) "These researches, which have already led to the saving of thousands of human lives and will lead to the saving of untold thousands more, have been carried on by the experimental method and can be conducted in no other way. This method is as essential for the advancement of medical science as for that of any of the natural or physical sciences. To restrict unnecessarily and unjustifiably its use is nothing short of a crime against humanity. . . . Upon the whole, looking backward, do we regret the past altogether? Looking forward, do we consider every new achievement a decided and manifest gain? The answer is not difficult. We feel deeply and intensely that we should hail what is new with interest and moderate enthusiasm at first, and not adopt it too soon as the beacon light to be followed until we have fully tested wherein it is good and wherein it fails. We feel with equal strength and earnestness that we should not abandon former lines of thought and the action that proceeded therefrom, simply because they are time-worn. Ideas, like clothing, are not threadbare merely because they have been worn, and if they be of good material and good make, they last at least for a time, and are still valuable. Ideas, like gold and precious jewels, sometimes, frequently perhaps, never lose their intrinsic and great value. We may change and modify and reset, but they remain all the same in reality, and to the man who is appreciative and who knows, they prove to him that he is wealthy when others are poor, indeed. The burden of this article and its summing up is to make one—all of us—conservative—conservative in the best sense, viz: 'Prove all things; hold fast that which is good.'"

The Carolina Medical Journal

COLLABORATORS.

T. Bahnson, M D., Salem, N. C.
Howell Way, M. D., Waynesville, N. C.
Allison Hodges, M D., Richmond, Va.
Westry Battle, M. D , Asheville, N. C.
Geo. G. Thomas, M. D., Wilmington, N. C.
P. Munroe, M D., Davidson, N. C.
Manning Simons, M D., Charleston, S. C.
C. Baker, M. D , Sumter, S. C.
R. L. Payne, M. D., Norfolk, Va.
H. S. Lott, M D., Winston, N. C.
J. W. Long, M D , Salisbury, N. C.
H. A. Royster, M. D , Raleigh, N. C.
Albert Anderson, M. D., Wilson, N. C.
Francis L Parker, M. D., Charleston, S. C.
Chas. W Kollock, M. D., Charleston, S. C.
Davis Furman, M. D., Greenville, S. C.
F. Julian Carroll, Summerville, S. C.
Translation and Foreign Reviews, Richard H. Whitehead, M. D , Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.
Contributors for the Original Department of The Journal are received, with the understanding that they are contributed exclusively to this Journal.
Illustrations necessary to elucidate the text will be provided without expense to the authors when suitable ink drawings or photographs are furnished.
Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

Hookworm Disease.

C. A Julian, B. S., M. D. President Davidson County Medical Society; ex-Second Vice President North Carolina Medical Society; Physician Thomasville Orphanage Infirmary, etc.

The researches of Chas. Wardell Stiles proved the importance of the hookworm disease and led others to extended and systematic inquiry as to its significance. Stiles' views were not altogether accepted, and many and various criticisms were published by the popular press and efforts were made to make the people feel that the hookworm man would get them if the didn't watch out. One editor of a prominent daily went so far as to class it with losing his cud, hollow horn and hollow tail. Strongly and violently as these researches are often opposed, sometimes from ignorance, sometimes by prejudice, much more frequently by that spirit which acknowledges no real good except what originates with itself; still the onward movement continues, gaining fresh numbers to its ranks and fresh impetus to its force.

This disease is caused by worms about one-half inch long which inhabit the small intestine two or three inches below the stomach. They draw the blood from the mucus membrane of the intestine which is a constant drain. This seems to be more or less trifling, but the persistent loss of blood finally depletes the system so much that no ordinary treatment is able to make good the loss. This is, indeed, an important field for study. These parasites, by the abstraction of blood and through the absorption of ptomaine, the formation of which, or may be a concomitant of their life in the body, are at the bottom of the anaemia. Many of my cases bearing all the characteristics of pernicious anaema have been repeatedly cured by the expulsion of the hookworm. The reports of some authorities afford ground for the belief that all these cases recover. As a rule all cases improve

very markedly for a time, perhaps apparently recover, but many relapse and ultimately succumb. I refer only to those cases where the blood destruction is great. Thompson (1900) says: "The anchylostoma duodenale or strongylus duodenalis is a worm inhabiting the duodenum and jejunum of man and certain apes. The male is a third of an inch long and the female about twice as large. The worm bears hooklets, used in seizing the mucous membrane. The larvae develop in moist earth. The parasite is unknown in North America.

"The parasite lives upon blood drawn from the mucous membranes. It produces gastro-intestinal irritation, and in time anaemia. There may be hemorrhage from the bowels. The ova may be recognized in the feces."

Osler says: "Anchylostoum duodenale is the only strongyle harmful to man. It belongs to the same family as the strongylus armatus, which causes the verminous aneurism in the horse."

Dally states that "the parasite was described many years ago by physicians in the Southern States, but no recent observations upon the disease have been made in this country."

I have accepted the nomenclature as given by Stiles, Uncinaria duodenalis, on account of the rule adopted by zoologists, the law of priority. Stiles in Bulletin No. 10 reports upon the Prevalence and Geographic Distribution of Hookworm Disease says: "The genus uncinaria contains blood-sucking worms of the worst type. They are usually not over an inch in length nor thicker than an ordinary hatpin. They are provided with a heavy armature of sharp teeth, by means of which they pierce the intestinal musoca of their host. They have also an unusually strong muscular esophagus which serves as a pump during the act sucking blood."

The local conditions which foster t spread of the hookworm disease is moi earth, stagnant water, and the scatterir of faeces loaded with eggs. The eg do not mature in the intestine but a discharged with the faeces and hatch about 24 hours. The earth becomes i fected by carelessness in regard to def cation. The majority of my cases co fess to the habit of eating dirt. Son months ago, in an article on Chthon phogia in the *Charlotte Medical Jou nal,* I described these cases. Since th I have made microscopical examir tion of the faeces of those cases a found the eggs of the hookworm every case. The symptoms appear i sidiously after disease has endured f years. Gastric or gastro-intestinal di turbance may be the only symptom the early stage, but if the parasites a present in great numbers anaemia gradually produced and constitutes t characteristic feature of the diseas Most characteristic symptoms are wea ness, cachexia and progressive anaemi Where the parasites are numerous t symptoms begin in two or three wee after infection; where they are few, t symptoms may be absent. The mo habitual local symptom is pain, sor ness and tenderness in the epigastriu or just below the liver.

At times there is lack of appetite, a again it is inordinate. We have stor atitis and salivation in the unyieldir form, oedema beginning in the eyeli and later becoming general in an almo constant symptom. The carotids pu sate very perceptively and is importa as a diagnostic sign; distinct murmu can be heard over the arteries and veir The skin is characteristic and presents pale yellowish appearance.

Dr. Stiles called my attention to t

lank stare" or "fish stare," which he is proven diagnostic. In my cases I ave observed that indescribable stare—ice seen it can never be forgotten. I rmerly attributed it to degredation d the consciousness of the habit of rt-eating. During the last year I d under close observation a great any dirt-eaters. Suspecting that these ere infected with hookworm I report- them to Dr. Stiles, who was ordered Surgeon-Gen. Wyman to visit me d make necessary examination of y cases. Out of the ten cases I had lected six were found, upon the first croscopical examination, to be infect- with hookworm. Since then I have ade secondary examinations and und the other four heavily infected. is sometimes necessary to prepare veral slides to obtain positive results. the time of our first examinations e four who showed negative results d diarrhœa. This, I think, accounts it.

As stated before, the appetite is vari- le, but at first that of the dirt-eater ravenous. They are constantly beg- ng for something to eat. I believe t "earth hunger" can either be cause effect of hookworm disease, but de- edly in favor of the cause. There many stages and classes of dirt-eat- , and this may account for a lack of owledge as to cause or effect. A ld may only at first be fond of stick- wing, or chewing grass, become af- ted with hookworm and develop an reme mania.

The following group of cases pre- ts all the forms of uncinaria duoden- , except the dropsical stage.

Fig. I.

from a photograph of a young girl pected a few months ago of eating t. Upon inquiry confessed that she l formed the habit from seeing others eat it. The tongue was found coated and the abdomen tympanitic. Anaemia was developing. She complained of tinnitus aurium, dizziness and palpitation of the heart. Eyelids œdematous

Fig. I.

and skin a pale yellow. Made positive diagnosis, by microscopic examination of faeces. This is a medium case—no emaciation, and the subcutaneous fat is well preserved. Rapid recovery by the Thymol treatment only.

Fig. II.

Photo of young boy. This case presents the severest form of dirt-eating. History of eating slops and refuse fruits in the streets and hotels. When first came under observation was most pitiful object; marked emaciation; intermittent heart; visible pulsation of the carotids; frequent respiration and dyspnoea; advanced aenaemia and badly disturbed digestion. Examination of faeces revealed eggs in great number Thymol was administered to expel the

parasites, and tonic with nourishing food to build up the system were given for four or five months. This patient

Fig. II.

has fully recovered, is strong and fat. From the most degraded condition, mentally and physically, he has developed and is now one of the finest, bright eyed boys that I know.

Fig. III.

From photograph of young boy. Severe case of long standing, and undeveloped, both mentally and physically. Skin shriveled and pale; face anxious; anæmia of the eyelids, pupils dilated, and stare blank and stupid; lips and gums pale, teeth irregular and decayed; the tongue is spotted and ulcerated, and the mouth filled with deep putrid sores; severe ulceration of the hands and feet; arms and legs reduced to skin and bones; ribs prominent and heart-beat visible, and great physical weakness; ecchymosis over body, especially abdomen; stools and vomitus bloody. After the beginning of the thymol treatmer many hookworms were expelled. Ger eral tonic treatment was also institute but in four months the patient finall succumbed.

Stiles (1903, p. 64) states that th breasts of females who have contracte hookworm disease before puberty re main more or less undeveloped. Sinc then Drs. Stiles, J. P. Munroe and my self examined a young girl pretty fa advanced in the disease, who had ur usual development of the breasts, bu no hair on pubis or armpits.

Prophylaxis.—The prophylaxis c uncinariasis includes the prevention c infection in places where the parasite are present and the prevention of th introduction of infected cases int healthy communities. Great care shoul

Fig. III.

be observed regarding the location an construction of water closets. Th greatest prophylactic measures are th

of latrenis, especially in public ces and institutions, and the boiling water used for drinking purposes.

Treatment.—The treatment should directed to the destruction of the asites and general treatment to build the depleted system.

Vermicidal Agents.—Those usually ployed are thymol, male fern and omel. Thymol acts promptly and ll, and is specific. For a day prior he administration of thymol, the pa- nt should be placed on a very light t and also for three or four days af- ward. Bozzolo, who introduced the mol treatment, used doses as large a half to two drachms daily. Lutz orts most excellent results by giv- xxx gr. doses two hours apart after alomel purge. The most usual direc- ns given for thymol treatment are xi grs. at 8 a. m.; xxxi grs. at 10 a. ; castor oil at 12 noon for one day week. I have found that these ge doses are followed by severe burn- pain in the stomach, excessive st, difficulty of urination, giddiness, ntness, and lowering of the tempera- e and pulse. My experience has n largely with children, and the di- ions are these: vi to x grs., accord- to age, at 6 and 8 a. m., followed n castor oil at 10 o'clock same morn- I give this only one day per week continue it until not only the worms not be found, but all eggs disappear. rms are seen in the stools usually n twelve to sixteen hours after the mol is given. I give thymol now in ases, even in those of excessive de- y, and continue it in small doses one per week, extending over a period everal weeks.

eneral Treatment.—After the re- al of the cause of the disease, ex- ion of the parasite, the anaemia or other effects must receive appropriate treatment. Iron should be given daily except the days the thymol is taken. Rest in bed and nutritious food in small amounts at fixed intervals. Special care should be directed to the bowels, and if constipation is present, a saline purge should be given each morning.

Some vegetable bitter, as gentian, or taraxacum should be given. In marked anaemia arsenic is of great service.

There are two desiderata to accomplish. First, remove the parasites and, second, build up the patients.

The Influence of Alcohol in Heredity.*

By A. W. Moye, M D., Greenville, N C.

It has long been the custom for the annual essay read before this society to deal with some subject of interest alike to the general public and to the members of our profession. In obedience to that custom I shall call your attention tonight for a short time to the subject of "Heredity," and especially the influence of alcohol in heredity:

Hundreds of years ago the great Law-Giver laid down the general proposition that the sins of the fathers shall be visited upon the children to the third and fourth generation. If he had gone further and laid down the counter proposition, that the children shall inherit the strong minds and the strong bodies, the high ideals and strong intellects to the third and fourth generation, it would have been a brief and concise statement of the laws of heredity. It is not my purpose tonight to consider this subject in all of its phases. Time would not permit me, even if I were competent to do so, to enter into the many factors which we have to consid-

*Presented to the North Carolina Medical Society at its Hot Springs meeting, June, 1903.

er in the study of this subject. The members of our profession are well aware of the frightful number of children who are brought into the world, handicapped in life's great struggle by some disease or trait of character inherited from its parents. Some of the States of Union have, on this account, passed stringent laws regulating marriage. This same fact was realized by the Spartans centuries ago, and by strict laws and strict enforcement of these laws, they were enabled to build up and develop the men and women of Sparta into the grandest physical specimens the world has ever seen. The Spartans made the mistake of sacrificing the mental and moral to the physical, and on that account, their glory was of short duration.

There is one factor which enters into this subject of heredity to which I shall devote this paper, and that is the influence of alcohol on future generations. In my humble opinion, it is *the* great factor with which we have to deal in the study of this subject.

In my limited experience I have seen so many children afflicted with this horrible curse, that I have felt that perhaps we were not giving it the consideration it deserved.

The superintendents of our hospitals for the insane tell me that alcohol causes more insanity than all other agents combined. Think of it, fifty per cent. of the inmates of all our insane asylums are descended from alcoholic parents. The children of alcoholic parents are prone to many nervous disorders, even if they are not insane. Almost every degenerate I have seen in my practice is in this class, the sons of epileptics and dipsomaniacs, and the daughters are nervous wrecks, hysterical, epileptics and are prone to be habitues of some drug. Nearly all of the morphine fiends with whom I h come in contact are descended from coholic parents. Of course, there some exceptions, as the use of the d sometimes begins from taking it for relief of pain, but even they are gen ally able to break off the use of drug, if their minds have not b weakened by some hereditary taint. section of my county, where we f more of these unfortunate creatu than in any other section, has l been known as the home of drunka The offspring of sound, temperate p ents are less likely to suffer from a holic degeneracy, even though they n be heavy drinkers themselves, than offspring of alcoholics, who may drink half so much.

Pronounced alcoholism in the pare always means examples of mental ease and weakmindedness in the c dren, provided the alcoholic tende is not acquired late in life. In t event children who are born prior the acquiring of the alcoholic habit h a better chance. An inebriate fathe certainly a handicap, an inebriate mo er is a greater misfortune, but the c of an inebriate mother and father is most certainly doomed from its bi It has often been proven, by most eminent modern investigat that even a moderate quantity of a hol in the circulation, will cause mar changes in the cortical neurons of brain, changes in the neucleus, gran bodies and protoplasm may be actu seen; because these cells are the m rial basis of man's moral sense and c science, the physical representations his aspirations, his likes, his fears his will-power, their harm seems to of far greater importance, than question of the effect of alcohol on stomach and liver. It is a law of ture that the most highly organized

es suffer first and most from the ac-
on of toxic agents in the blood; so it
the moral and ethical sense which
ffers first and most and is often the
ly manifest evidences in the first gen-
ation, ot the powerful effect of alco-
ol, even if taken in moderate quan-
ies.

It is only by the foregoing facts that
e can understand the powerful influ-
ce exerted by alcohol in heredity, and
r that reason I have called your atten-
on to them tonight.

If we would do all in our power for
e physical and mental development of
ankind and to create and produce and
aintain for our State really healthy
d strong citizens, our endeavors
old first be directed to the elimination
all influences which operate to de-
oy the physical and mental strength
the new-born, and we should use our
st efforts to suppress alcoholism.

How to Prevent Malaria.*

Hugh B Hoyle, M D., Lexington, N C.

Malaria is invariably caused by a par-
e, an ameba, in the blood.

So far as is known, the only way by
hich the parasite is conveyed from one
lividual to another is through the
ency of the mosquito of the genus
apholes.

The ameba of malaria does not
ginate in the mosquito, but is taken
o the stomach of the insect when it
es a human being who is infected
h the disease.

Now, for the spread of malaria, three
ngs seem to be necessary:

First, a patient who is infected with
disease.

Second, a mosquito to carry the in-
tion.

Third, a victim to whom the disease may be carried.

If we can eliminate any one or all of these factors, we can stop the spread of the infection.

At least this furnishes us with three points of attack.

First, the patient sick of malaria should be protected from mosquitoes, just as we would isolate a person sick of smallpox or any other infectious disease.

This may be done by means of screen doors and windows and mosquito bars over the bed.

Besides this the patient should be thoroughly cured of the disease by means of quinine, so that he will not be a constant source of infection.

This will be doubly effective during the fall and winter months, since the adult mosquito dies during the cold weather, and if no malarial infection remained with human host over winter, the newly hatched mosquito would find no "seed" with which to commence business in the spring.

The second point of attack is the mosquito, and let us do battle against all mosquitoes, though only the anapholes has been convited of the crime of carrying this infection, all mosquitoes are guilty of crimes worthy of death and let all be exterminated together.

In the first place all ponds and puddles of water, the breeding places of mosquitoes, should be drained. where this is at all practicable. Rain-barrels should be watched and overturned as soon as wiggletails, the larvæ of mosquitoes, appear. Ponds that cannot be drained should be oiled with kerosene oil, a sufficient amount to cover the entire surface of the water. This kills the wiggletails by excluding the air.

A gallon of oil to every 100 square

---

*Read before the Davidson County Medi-
Society at its July meeting, 1903.

yards of surface is said to be the proper amount. And this should be repeated every two weeks during the entire breeding season.

The third point is to protect the unaffected from mosquitoes. To tell the methods would be only to repeat the screen-door and mosquito-bar proposition.

Patients should not sit on porches or other places exposed to mosquitoes after night.

Every wall should be closely inspected and every mosquito killed, for mosquitoes live even in coldest weather, when protected by good warm houses, and supplied with nice warm sleeping rooms.

If these rules are rigidly enforced I see no reason why malaria might not be suppressed as effectually as has been Asiatic cholera or any other infectious disease.

Some Mistakes of a Country Doctor.

By One of Them—Third Paper.

It takes moral courage of a high degree for a doctor to acknowledge his errors. Perhaps from a standpoint of principle he should, but it is not policy to do it, especially when the mistake is known only to himself. Candor with one's patients begets confidence. Truthfulness is gem of the first order in the practice of medicine, as it is elsewhere, and principles must not be sacrificed to policy. To live up to all these in our dealings with our patients is commendable, but how many do it in the errors committed.

Whatever may be the punishment we meet out to ourselves, we prefer a lessening of it from the public.

A strict examination of our errors may conclusively demonstrate that there is no extenuating circumstances, but with the public we want the evil palliated, and try to soften the punishm by explanations. Conscience spares not in its lashings, but we ask the pu lic to grant us absolution. We see a realize what we have done, either in simplicity or enormity, but we want cloak it from the public.

This is human nature, and I presu I have my share of infirmities in t line. I am sorry for all the errors ma and never made one that I did not t to profit by it. I regret those ma through ignorance, but many (so of which I report) were inexcusab and when from the great storehouse memory these cases are brought out all their vividness and attention to c tail, as only the most unpleasant of e periences can be reproduced, my men condition is in a corresponding depr sion.

The diagnosis of jaundice is simp apparently. The cause of it sometim presents serious difficulties. A case this kind is here presented:

Mrs. A. had been troubled for seve hours during the day with colicky pai becoming very intense during the nig when I saw her. She is rather pletho and gave history of impacted gall ston several years since. Found patient great pain; anxious expression of fac slight rise in temperature. An inten jaundice developed the last few hour severe itching, and hyperesthesia skin over the abdomen, so acute as prevent an examination of liver, or co dition of bowels. The diagnosis w plain—I had a torpid liver, hepatic c ic, suppressed bile from obstructio and re-absorption. My treatment ga her only partial relief, the pain recu ring every few hours; after three four days assuming a dull ache in t region of the liver. Patient grew wor in many ways, headaches, pains in t limbs, emaciation, nausea and the jau

e persistent. During one of my vis-
two weeks after first attack, I no-
d a slight wrist drop and immediate-
examined the gums, finding a faint
e line. Continuous inquiry, for I
staked my professional reputation
the liver being the sole and only
se of her troubles, developed the fact
t for a week prior to her illness, she
been doing some amature work
und the house in painting; that she
s not accustomed to this kind of work
her hands were always soiled; that
day before her illness she had used
ite lead in its pure state in mending
glass roof of a flower pit; she had
a few apples in the empty can be-
e the lead adhering to its sides was
y dry; these she had eaten the morn-
of her illness. The treatment was
once directed to the lead poisoning,
my patient made a rapid recovery.
n this case there was some excuse
my error. I learned from it that all
es of jaundice do not arise primarily
m a diseased condition of the liver.
is knowledge has helped me out of
re than one difficulty, as the report
the next case will show, wherein I
not make a mistake.

d. R., a boy of sixteen, robust, well
wn, the picture of health, with never
ache or pain, came home from a
rt errand with severe nausea, de-
ssed feeling and slight derangement
vision, all developed within the last
minutes. His mother noticed a
ght yellowness of the eyes and skin.
these symptoms were intensified
ing the next hour, and I was called,
riving at the house two hours after
symptoms were experienced. The
ndice had increased very rapidly and
eyes were now almost saffron, and
whole body a bright yellow hue.
nausea was not so persistent, but
lache was intense, pulse rapid, but
full and regular; respiration normal. The rapidity of the invasion of the jaundice led me to question a diagnosis of hepatic disorder, and the boy's previous health supported the doubt. I proceeded to question him as to his errand, his eating or drinking during his trip, or any fall or injury he may have received. All these were negative except for a slight thorn prick, as he thought, felt in one leg, as he passed through some underbrush in a field. I examined the place and found only a very slight puncture, with no blood, but slightly inflamed; no pain now and very little when the wound was made—not enough to cause him to stop and examine it. I decided I had to deal with the bite of a poisonous reptile, and directed my treatment accordingly. The boy became unconscious, went into convulsions and his life was despaired of for several hours, but finally recovered. The finding of a snake in the immediate vicinity of where the boy thought he received the thorn prick is not positive proof of my diagnosis, but it is supportive evidence. A consulting physician arrived after the boy was in convulsions, could not accept my diagnosis until a search in this underbrush revealed a small snake of species unknown to any one present.

It is well to remember that poisons sometimes produce a rapidly developing jaundice.

The diagnosis of poisons and the character of the material presents many difficulties when no history is obtainable, and we should be slow to censure for errors committed under such conditions.

Lucy ———, a bright little girl of 8 years, attended school as usual one day. From some cause school was dismissed an hour earlier than the regular time. Her home was a mile away, half of the

distance in company with several other children. One hour after the regular time of her return from school and two hours after she should have been home, she had not come, and the mother sent some one to seek her. She was found a quarter of a mile from home, by the side of a foot-path through a piece of woods—her regular way to and from school—in an unconscious condition. She had been seen by a neighbor a short while before being discovered, going towards home in a fast run. Her books and lunch basket had been thrown aside before falling. Near where she fell she had vomited, probably by running her finger into her throat, as one finger was soiled. I was known to be in the neighborhood and was with her in less than an hour, and the above is the history given me. I further ascertained that she had suffered from a mild sunstroke during the summer, and had not been quite strong since, being easily exhausted on slight exertion. Urine and faeces have passed involuntarily since being brought home. Face much flushed; pupils dilated; heart's action rather weak; extremities cold. The former sunstroke, the weakened condition of the patient and her having been seen in a fast run, led me to a diagnosis of sunstroke for which I treated her. She had two or three convulsions, followed by coma and death in three hours.

While preparing to leave a mesenger arrived seeking my aid in behalf of two other children— school-mates of the dead girl—only a mile away, similarly affected. These proved to be a boy of 11 and a girl of 9 years of age. The boy was only slightly affected, and was able to give a history of the three loitering on the road, and he playing doctor and administering pills to the girls in the shape of jimpson seed (stramonium datura)' some of which he took hims but not so many as the little girls. B these children were very strong a healthy. The boy responded readily treatment,, but the girl required c stant and heroic treatment, for twe hours, before rallying.

I cannot say that the result wo have been different in the first case I I recognized the cause of the trou on my first examination, but I have ways regretted that I did not. She v not so strong as the other children, a from the boy's account evidently tc more of the seeds. The poison w much quicker in its action on her s tem, too, as this boy and girl had be home fully an hour before experienci any ill feeling.

To be able to do the right thing at t right time is to be happily endowe To have the mental faculties so even poised that dangerous or alarmir emergencies do not frustrate is desir ble at all times, and occasionally th want of mental balance brings resul undesired to both patient and doctor.

I had been attending Miss M. for m laria for three of four days, and di charged her as convalescent; two da later was called hastily to see her, bein hurried on my way by two or three e tra messengers, sent to hasten me. O arrival I found that love of the youn doctor—the old woman with her ba of herbs; in fact, there were four c them, each with an infallable remedy- and each jealous of the others, and a bent on "snowing under" the youn doctor. The whole neighborhood wa there, too, and all were excited, bu above all could be heard the loud an lusty screams of my patient. I foun her—a woman of 26 or 28 years of ag —of a rather nervous temperament, be ing partially held and much coaxed, b several women, all talking, holding an

bing the patient, on a bed, in an al-
st nude state. The patient was
aming and calling on first one and
n another for aid, or death. The
ole body was covered with wheals of
intense red color, from the size of a
ie to that of a silver dollar, a few
large as the palm of a man's hand.
was a case of urticaria of the most
ere and pronounced type.

Each of the aforesaid old women was
plying her favorite remedy to some
tion of the anatomy, and each was
itive that she could relieve the pa-
nt if allowed her way. To get a his-
y of the attack was almost impossi-
. All were forward in telling of its
ning on immediately after the first
se of the tonic I had sent over the
r before and only received that morn-
r. No one could tell what she ate
breakfast, condition of bowels or
v she spent the day and night before
s. There was an intimation of a
d-boiled egg and a piece of fresh
k, but with the family urging me to
something, the old women each try-
to tell me of her remedy and its vir-
s, and the patient calling on me for
soothing application to relieve the
ning and itching, guess I became as
boys would say "badly rattled,"
so, for an hour, I applied as vigor-
ly as any of the old women various
sundry salves, lotions and washes,
all to no good, so far as the patient
s concerned, and a whole lot of harm
ny budding reputation. Now after
hour another complication arises in
ck of the tongue—the only case, by
way, I ever saw of urticaria of a
cous membrane. One or two wheals
eared upon it and it became so much
olen as to protrude. The screams
e not so violent, but the writhings
e persistent and the groans terrible.
course, all thought death was immi-
nent. An attempt to examine the tongue gave me an odor of sour stomach, and I, for the first time, was able to reason with some judiciousness. My first act was to turn out everybody except an aunt and one neighbor of the patient. Talk of courage! Well it was there; for it was by force at last that the room was cleared, and the abuse and mutterings were both loud and deep. A hypodermic of morphine (a new thing in those days) was followed as quickly as I could prepare it, by a heavy dose of ipecac. Emesis followed promptly, showing various undigested articles of food, the egg being prominent. Then an enema of soap and water with very copious discharge from the bowels. All local application and rubbing were suspended on turning the crowd out of the room. Before the patient could get back to bed after the action of the bowels the itching and burning had ceased and the wheals had disappeared. In ten minutes more she was fast asleep, to the gratification of her attending physician, the relief of the family, the surprise of the assembled neighborhood, and the discomfiture of the old women, who were prognosticating evil of all kinds.

It it probably in obstetrical work that a doctor needs most to keep his mental equilibrium. Mrs. G. was delivered of her third child after a tedious but not hard labor; placenta removed with some trouble in 15 or 20 minutes; hemorrhage copious at times, but not considered dangerous and controlled very easily; patient resting well and child dressed, etc. An hour after delivery I lay down on a lounge in an adjoining room for a nap, leaving a nurse and a sister of the patient in the room. I had lost much sleep, was badly fagged with several days hard riding, and was sleeping very soundly, when I was shaken

roughly and told that my patient was dying. It was only too true. What I did I do not know. That I worked and administered remedies I am sure. In thirty minutes she was dead, and I do not know the cause of her death. The result may have been the same ha awakened with my mental faculties the alert, as many of the accidents a ing during labor can be met by pro and *intelligent* action.

ABSTRACTS.

The Treatment of Acute Suppuration of the Middle Ear.—Dr. MacCuren Smith contributes his views as to the treatment of this condition to the *Philadelphia Medical Journal,* of June 6th. He believes in the old axiom, "wherever there is pus, let it out," and when the middle ear is filled with pus he advises that it be thoroughly evacuated. To do this thoroughly the membrane must be thoroughly incised from the most bulging point downward to the lower border of the canal, the incision curving either forward or backward. This curving of the incision will insure the opening remaining patulous long enough to admit of good drainage and proper after treatment.

He cites two reasons why so many of these cases do not readily yield to treatment. In the first place if the membrana tympani ruptures spontaneously, the opening thus formed is usually situated in the superior part of the membrane, which only allows the pus to escape by the process of overflowing; furthermore, pressure sufficient to produce rupture frequently causes maceration and peeling off of the mucosa. Autoinfection, therefore, occurs on account of the cavity being constantly filled with pus up to the point of perforation. Again, the edges of the ruptured membrane are irregular, consequently they do not coaptate readily, nor unite kindly; whereas a clear incision will always repair with the gre est facility. On the other hand, if o a puncture of the membrane is ma the opening is too small to provide a quate drainage.

After thorough evacuation of fluid, a good recovery will be made many cases by cleansing the exter canal and middle ear with an antisep solution followed by the introducti of a strip of iodoform gauze deeply ir the canal to provide good drainage, newing every day or two as requir One great object in the treatment is prevent the development of bacteria reducing the temperature of the pa and keeping the surface dry, ev after the secretions have been remove The surface can be dried with cott and hot air and then dressed with sor impalpable power, such as boric ac or aristol, then repack with iodofor gauze. The general health must r ceive attention. The patient is be kept in bed. The bowels must be ke open and the activity of the kidneys a skin looked after.

Emergency Makeshift.—Dr. H. Stanley (*New Albany Medical Herald* needed to make an immediate chemic examination of urine and had no urin meter. He solved the difficulty as fo lows:

"I went to the drug store and calle for a graduate and a bottle of distille

ater. I put the graduate on a pair of unter scales and balanced it with an d weight and some small shot. I then ssed sixty cubic centimeters of the stilled water into the graduate and und that it weighed 911 grains. I en emptied the graduate and dried it oroughly with a piece of clean old islin. Filling the graduate to the 60 c. mark with a specimen of the appli-nt's urine, cooled down to the same gree as the water was when weighed, found that it weighed 935 grains. Di-ling the weight of the urine by the eight of the water, we found the spe-ic gravity to be 1026. I wrote to the surance company explaining the ethod of obtaining the specific gravity d they accepted the examination."

McCormick (*Therapeutic Gazette*) orts 408 cases of typhoid fever treat-largely with guiacol, with death rate 5.4 per cent.

He also treated as an experiment, ir cases of typhoid fever with e acid sulphate of soda. These cases re all placed on treatment on or be-re the 7th day of illness, and from his perience with the drug in these cases d bacterial tests in the laboratory, makes the following deduction:

1. That the acid sulphate of soda is rmicidal to typhoid bacilli in a solu-n of 1 to 300.

2. That it does not have a toxic ef-t when used hypodermically on guin-pigs in a solution of 1 per cent.

3. That it increases leucocytosis, and this way helps nature to combat the ease.

4. That it neutralizes typhotoxin, d must in a measure lessen the delir-n, fever, diarrhea, and mental stupor, d modify various other symptoms at-buted to this poison.

5. That it prevents to a great degree the congestion of Peyer's patches, and the other lymph follicles of the intestines.

6. By so doing it prevents to some extent hemorrhage and perforation.

7. That it will resist the bacilli or toxin in any portion of the body.

8. That it will greatly lessen the complication of the disease.

9. That it is a prophylactic, as it can be taken by mouth in large quantities in an antiseptic strength, and as it will not be neutralized in the stomach, although the susceptible typhoid stomach is one of subacidity.

10. That this acid sulphate of soda will replace physiologically the deficient hydrochloric acid.

11. That it furnishes an abortive treatment, since if it lessens the intestinal involvement it would necessarily shorten the disease.

12. It may be used to purify contaminated drinking water by allowing the solution to stand from twelve to fifteen minutes before being taken.

The Treatment of Convergent Strabismus.—Dr. Wm. G. Craig in an interesting paper which appeared in the *N. Y. Medical Journal* and *Philadelphia Medical Journal,* October 17th, states that "not only the laity, but a great many physicians are under the erroneous impression that if crossed eyes are straightened by an operation, the patient is cured and the result all that is to be desired. There is, again, belief that the deformity will be outgrown, or that nothing can be done until the age of 8 or 10 years, when by a very simple operation the eyes can be made straight." It is this condition of affairs that often hadicaps us in the treatment.

In at least seventy-five per cent. of the cases of convergent strabismus (99 per cent. is nearer the fact—Ed.) there

is an error of refraction, and the vision of the two eyes is unequal in the majority of cases, and is generally quite deficient in the squinting eye. The ideal cure for stribismus would be to restore vision and remove the deformity. If the function of the eye can be restored, or partially so, and the vision improved, effort should be made to accomplish this. Cases are not wanting to show its possibility. Patients with stabismus and poor vision in the squinting eye have lost the good eye and in a short time the vision in the faulty eye has increased to normal or nearly so. Efforts should be made early to improve the vision of the squinting eye and be kept up continuously. The earlier in life they are begun, the better. The different procedures may be outlined as follows:

The use of mydriatics.

Correction of refraction errors.

The exclusion pad.

Bar reading.

The stereoscope.

By using atropin the effort at accommodation is removed and the internal recti relax. Properly adjusted gla lessen the tendency to convergence, the glasses should be worn constan In very young children the opthal meter and ophthalmoscope should relied on to learn the refraction er the eyes being under atropin. The at which children will wear glasses depend on the parents and on refraction error. Gould reports a c age two years, whose squint was enti ly relieved by glasses. (The revie had a similar case 10 years ago. Marl convergent strabismus was pres in a 2-year-old girl. Under atrop the refraction was determined by ophthalmoscope and glasses order The child in a few days was relieved strabismus by the glasses, and wo cry I want my "pex" before she wo get out of bed.)

The exclusion pad is worn over t non-squinting eye a few hours dai thus forcing the squinting eye to wo

Operative measures will be requir in many of the cases, and the time wh it should be done will depend on t merits of each case.

Clinical Society of the New York Polyclinic Medical Scho and Hospital.

Meeting Held October 5, 1903.

The president, Dr. James Burtenshaw in the chair.

Immunity.—The paper of the evening was read by Dr. F. M. Jeffries. It was a fifteen minute resume of the investigations culminating in our present ideas of immunity. The paper opened with definitions of immunity and infection and then described and classified the varieties of immunity.

After classifying the means by which immunity may be acquired, the speaker proceeded to a discupssion of the p duction of toxins and antitoxins, a the statement was made that when t problem of the production of antito is solved the problem of immunity w also have been solved. The subje of hemolysis were briefly gone ov and then the two chief theories of i munity were explained, viz: Metsch koff's theory of phagocytosis and E lich's side-chain theory. It was stat that neither of these theories explain

l phenomena of the subject, although ey have added materially to our prop- understanding of the same. Other nditions than those explained in these o theories must be taken into con- deration.

The paper closed as follows: "To m up, the processes of immunity are ceedingly complex, and there is no eory yet advanced which satisfacto- y meets the requirements of a thor- gh explanation. The end is only at- ined by the activities of all parts of e body, the cells as well as the fluids. or must we lose sight of the fact that e bacteria themselves are subject to riation, as an example of which may cited the colon bacillus, the normal bit of which the intestinal tract, d which probably has to do with the ocesses of digestion, yet let the proper nditions be supplied and it gives forth poison; that is to say, becomes path- genic; and finally we know that many rhaps of all bacteria produce in their owth enzymes which are bacterio- tic in themselves." A number of ar- cles in English dealing with the sub- ct were citied.

Dr. Albert Kohn opened the discus- on of Dr. Jeffries' paper. He said at Metschnikoff studied the white lls. The origin of his work shows w laborious it must have been, and it wonderful how his theory of phago- tosis was gained on a theoretical sis, working on the lower organisms. e studied the exoderm, the endoderm d the mesoderm; the workings of this yer were to a certain extent of the me nature as those of the endoderm, at is, of a digestive type. He then gan to prove his conclusions on ma- ne animals, inserting foreign bodies order to see what the action would . He found that irritation was caused what seemed to be attempts at di- gestion. Later, he modified his primary conclusions that the phagocytes were only bodies concerned in the digestion of the bacteria and their toxins. His theory was accepted until Bouchard brought forth the theory that it is not the phagocytes that digest the live bacteria; that after their destruction they carried away their dead bodies.

As to the question of susceptibility, according to Ehrlich, all consideration of such outside factors as hygiene, traumatism, etc., must be omitted. If we have receptors which in the one set of cells will unite certain parts of the toxins, the haptophorus atoms, these receptors already exist, and they cannot be influenced by traumatism, hygiene, etc., unless the receptors are changed, decreased or increased by those outside factors. The fact that the alexin bodies can be destroyed by heat, a fresh supply of sear added, and the properties of the alexin bodies return proves that heat destroys the alexin.

Dr. James J. Walsh said that the subject of immunity was usually considered very complex. In reality, however, it is not more involved or inexplicable than is the simple matter of solutions. We pour sugar into water until it will not receive any more, but the same water will then take up a large amount of salt, and after it has become saturated with salt it will take up various other substances. A child suffers from scarlet fever and will not take the disease any more, but will, if exposed, take mumps or measles. It is as if the cells became saturated with the toxins of one disease after another. The first step in immunity, as regards our modern knowledge of the subject, was taken by Pasteur when he demonstrated that chickens at the normal temperature would not contract anthrax, though if their temperatures were reduced to that

of the animal in man, they were liable to anthrax. The six or eight degrees of higher temperature produced a natural immunity to the disease. In the light of Ehrlich's theory of immunity depending on the number of side-chains or cells, one is tempted to wonder whether more side-chains exist at the higher than at the lower temperature and whether a chicken's immunity sould be destroyed by a series of changes of temperature. As a matter of fact, Ehrlich's and Metschnikoff's theories are not so far apart as has often been thought. The protective substances in the blood cells, according to Ehrlich's theory, may well be supplied by the activity of the phagocytes,

The first immunizing process ever invented was Jenner's vaccination. During the past week, Dr. Walsh said that he had been with Dr. Calkins, of Columbia University, who has been working on the protozoon supposed to cause smallpox. This protozoon occurs also in vaccinia. In the case of vaccination, however, the parasites invade only the cell bodies, while in smallpox they invade the nuclei of the cells, grow much more luxuriantly, and after a time invade the whole body, thus producing generalized septic condition. In rec years we have come to realize as result of studies in immunity that bies who are fed on mother's milk better protected against contagious d eases than are those artificially fed. T principal reason for this is that m mothers have had the ordinary diseas of childhood and enjoy immunity fr them. Immunizing substances occur their milk and are transferred to t child during the nursing. This cons tutes another reason why mothe should be encouraged to nurse th offspring and not be allowed to negl this sacred duty unless there is so absolutely necessary reason.

We wish to solicit from our reader reports of unusual or interesting case too brief perhaps, for a completely wri ten paper, but suitable for recording u der "Clinical Notes." Many matters value to the profession can thus easil be recorded which otherwise will b neglected and never become availabl for further reference. We wish ou pages to be utilized for whatever will b of benefit to the profession.

North Carolina County Medical Societies.

The following County Medical Societies have organized as component societies of the Medical Society of the State of North Carolina under the new constitution:

Buncombe County Society—President, Dr. Jno. Hey Williams, Asheville; secretary, Dr. Gaillard S. Tennent, Asheville.

Haywood County Society—President, Dr. J. F. Abel, Waynesville; secretary, Dr. J. Howell Way, Waynesville.

McDowell County Society—Pres dent, Dr. B. A. Cheek, Marion; secr tary, Dr. G. S. Kirby, Marion.

Madison County Society—Presiden Dr. J. H. Baird, Mars Hill; secretar Dr. W. J. Weaver, Marshall.

Brunswick County Society—Pres dent, Dr. E. G. Goodman, El Paso secretary, Dr. J. A. Dosher, Soutl port.

Robeson County Society—Presiden Dr. J. D. McMillan, Lumberton; secr tary, Dr. L. R. Kirkpatrick, Maxton.

Vautaga-Mitchell County Society—
esident, Dr. J. W. Jones, Boone; sec-
ary, Dr. McD. Little, Horton.
redell-Alexander County Society—
esident, Dr. S. W. Stevenson,
oresville; secretary, Dr. J. E. Mc-
ughlin, Statesville.
Catawba County Society—President,
. J. R. Campbell, Newton; secretary,
. Geo. H. West, Newton.
Caldwell County Society—President,
. A. A. Kent, Lenoir; secretary, Dr.
P. Ivey, Lenoir.
Cumberland County Society—Presi-
nt, Dr. T. D. Haigh, Fayetteville;
retary, Dr. Jno. D. McRae, Fayette-
e.
Cleveland County Society—Presi-
nt, Dr. T. E. McBrayer, Shelby; sec-
ary, Dr. S. S. Royster, Moores-
o.
Moore County Society—President,
. W. A. Monroe, Sanford; secretary,
. Gilbert McLeod, Carthage.
Caswell County Society—President,
. H. H. Dodson, Milton; secretary,
. S. A. Malloy, Yanceyville.
Person County Society—President,
. G. G. Nichols, Roxboro; secretary,
. J. A. Wise, Roxboro.
Durham County Society—President,
. A. G. Carr, Durham; secretary, Dr.
H. Ross, East Durham.
Granville County Society—President,
. S. D. Booth, Oxford; secretary,
. G. T. Sikes, Grissom.
Alamance County Society—Presi-
nt, Dr. Geo. W. Long, Graham; sec-
ary, Dr. W. R. Goley, Graham.
Orange County Society—President,
. J. H. Manning, Chapel Hill; secre-
y, Dr. C. D. Jones, Hillsboro.
Gaston County Society—President,
. R. M. Reid, Gastonia; secretary,
. L. H. Glenn, McAdensville.
Mecklenburg County Society—Presi-
nt, Dr. Henry Q. Alexander, Daven-
port; secretary, Dr. Parks M. King, Charlotte.

Harnett County Society—President, Dr. W. M. Harper, Dunn; secretary, Dr. O. L. Dunning, Dunn.

Burke County Society—President, Dr. Geo. H. Moran, Morganton; secretary, Dr. I. M. Taylor, Morganton.

Davie County Society—President, Dr. M. D. Kimbrough, Mocksville; secretary, Dr. W. C. Martin, Mocksville.

Wilson County Society—President, Dr. C. E. Moore, Wilson; secretary, Dr. J. W. Lamm, Lucama.

Henderson-Polk County Society—President, Dr. J. G. Waldrop, Hendersonville; secretary, Dr. A. B. Drafts, Hendersonville.

Transylvania County Society—President, Dr. W. M. Lyda, Penrose; secretary, Dr. Ed. S. English, Brevard.

Greene County Society—President, Dr. Albert West, Speight's Bridge; secretary, Dr. G. C. Edwards, Hookerton.

Lincoln County Society—President, Dr. L. A. Crowell, Lincolnton; secretary, Dr. J. S. Wise, Lincolnton.

Rutherford County Society—President, Dr. T. B. Twitty, Rutherfordton; secretary, Dr. E. B. Harris, Rutherfordton.

Cabarrus County Society—President, Dr. W. H. Lilly, Concord; secretary, Dr. F. O. Rogers, Concord.

Randolph County Society—President, Dr. S. A. Henley, Asheboro; secretary, Dr. C. C. Hubbard, Worthville.

Guilford County Society—President, Dr. M. T. Fox, Guilford College; secretary, Dr. Thos. R. Little, Greensboro.

Ashe County Society—President, Dr. J. W. Colvard, Jefferson; secretary, Dr. J. L. Balleu, Crumpler.

Forsyth County Society—President, Dr. H. S. Lott, Salem; secretary, Dr. R. D. Jewett, Winston.

New Hanover County Society—

President, Dr. T. S. Burbank, Wilmington; secretary, Dr. E. J. Wood, Wilmington.

Columbus County Society—President, Dr. N. A. Thompson, Whiteville; secretary, Dr. J. C. Hall, Boardman.

Sampson County Society—President, Dr. R. E. Lee, Clinton; secretary, Dr. G. L. Sikes, Salemberg.

Duplin County Society—President, Dr. Jno. M. Faison, Faison; secretary, Dr. Ben. R. Graham, Wallace.

Scotland County Society—President, Dr. D. M. Prince, Laurinburg; secretary, Dr. A. W. Hamer, Laurinburg.

Johnston County Society—President, Dr. G. J. Robinson, Smithfield; secretary, Dr. Etheldred Hooks, Smithfield.

Edgecombe County Society—President, Dr. R. L. Savage, Conetoe; secretary, Dr. S. N. Russell, Tarboro.

Yancey County Society—President, Dr. J. L. Ray, Burnsville; secretary; secretary, Dr. —— Edwards, Burnsville.

Wayne County Society—President, Dr. M. E. Robinson, Goldsboro; secretary, Dr. W. H. Cobb, Jr., Goldsboro.

Davidson County Society—President, Dr. C. A. Julian, Thomasvi secretary, Dr. D. J. Hill, Lexington.

Rowan County Society—Preside Dr. J. S. Brown, Salisbury; secreta Dr. I. H. Foust, Salisbury.

Vance County Society—Preside Dr. R. J. Gill, Henderson; secreta Dr. G. A. Coggeshall, Henderson.

Franklin County Society—Preside Dr. J. E. Malone, Louisburg; secreta Dr. S. P. Burt, Louisburg.

Stokes County Society—Preside Dr. A. G. Jones, Walnut Cove; sec tary, Dr. T. T. Watkins, Walnut Co

Beaufort County Society—Preside Dr. J. T. Nicholson, Washington; s retary, Dr. Ira M. Hardy, Washingto

Wake County Society—Presider Dr. J. J. L. McCullers; secretary, D Harry G. Utley.

A total of 51 organizations, includin 53 counties.

Modern pharmacy has given us rem dies that are new and valuable in th treatment of diseases and some that ar not so successful. Doctor, let us hav some of your recent experiences.

BOOK REVIEWS.

NOSE AND THROAT WORK FOR THE GENERAL PRACTITIONER. By George L. Richards, M. D., Fellow American Laryngological, Rhinological and Otological Society; Fellow American Otological Society; Associate Editor Annals of Otology, Laryngology and Rhinology; Otologist and Laryngologist Fall River Union Hospital, Fall River, Mass. Price $2.00. Published by International Journal of Surgery Co., N. Y.

This book derives especial importance from the fact that the diseases described therein constitute so large a share of the physician's daily routine of practice. It has been the author's aim to teach the practitioner how to diagnose these cases and how to treat them successfully and according to modern methods. With this object in view every effort has been made to describe the treatment in such detail as to leave no point obscure, and to simplify the technics as much as possible so as to avoid the necessity of an elaborate and expensive armamentari-

n. No space is occupied with theory, d the information given is based for e most part upon the author's own tensive clinical experience in diseases the nose and throat. For the sake of mpleteness a number of conditions e discussed which properly belong to e specialist, but with these few excepons the diseases described are such as n be treated by the general pracner. A noteworthy feature of this ork is the large number and excelnce of the illustrations, made from iginal drawings and photographs. Anher point of interest are the illustrans (half page) of various skulls owing the proper sites for operations the antrum of highmore and frontal nus.

TERNATIONAL CLINICS.—A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and Other Topics of Interest to Students and Practitioners by Leading Members of the Medical Profession Throughout the World, Edited by A. O. J. Kelly, A. M., M. D., Philadelphia, U. S. A., with the Collaboration of Wm. Osler, M. D., Baltimore; John H. Musser, M. D., Philadelphia; Jas. Stewart, M. D., Montreal; John B. Murphy, M. D., Chicago; Thomas M. Rotch, M. D., Boston; John G. Clark, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballentyne, M. D., Edinburgh; John Harold, M. D., London; Edmund Landolt, M. D., Paris; Richard Kretz, M. D., Vienna, with Regular Correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels, and Carlsbad. Volume I, Thirteenth Series, 1903. Philadelphia, J. B. Lippincott Company.

The International Clinics, Volume I, (13th Series) is as usual, full of choicest selections from the lectures of the leading clinicians of America and Europe. All of the various sections on treatment, medicine, surgery, pediatrics, orthopedics, special articles and progress of medicine, are of special merit, and it is difficult to decide which should have special mention. Prof. Osler's lecture on anurism of the descending thoracic aorta is very elaborate, well illustrated and full, as all of his medical production are, of instructive material. Likewise valuable are the articles of Reynold Webb Wilcox on cardiac and vascular fibrosis; Hodgson's disease; the treatment of anaemia; anemic and vascular murmurs and Prof. Thomas Satterthwaite's lecture on Navheim's methods in chronic heart disease with adaptations. Gastric dilatation and gastric stagnation, and pyloric obstruction along with the clinics by W. W. Keen and Prof. Nichols Senn are more than worth the price of the volume. The practitioner who does not read the international clinics misses much of the cream of modern medical literature.

EVERYBODY'S MAGAZINE, November, 1903.—A mission is liable to swamp a magazine. So much zeal is developed that the real function of the publication, which is to entertain, is forgotten. Into this excess *Everybody's Magazine,* which has recently undertaken a crusade against the idolatry-of-riches habit in America, is obviously not to be led. The November contents table makes a most inviting showing, presenting as it does stories and sketches by such amus-

ing writers as Alfred Henry Lewis, O. Henry and Eugene Wood. There is no intrusion of a policy at all, and the reader is likely to find himself in the midst of Francis Bellamy's article about "Successful Men Who Are Not Rich" without dreaming that there is a serious moral to it. Mr. Bellamy avers that the nation is losing its ideals and that today success only means wealth. The millionaire is the modern hero. The newest creed is, he says: "Brains may be more important than money, but nowadays the best way to convince the world that you have brains, is to make money." The smart set of New York is frank in its exclusion of people who are not rich and has no place for statesmen, authors or scientists unless they have money. On the other hand, he instances important men in this country whose position is a splendid protest against the prevailing craze. Their careers, as stated here, are c tainly inspiring. The article will people thinking about certain sign cant tendencies in modern life.

Alfred Hodder, who collabora with Josiah Flynt in his series of stud of "Graft in American Cities," scribes in "Reform that Reform what has been accomplished for dec cy in New York by an honest admin tration. There is also an authoritati summing up of the career of John exander Dowie by a man with the ar lytic capacity for the task.—*I. K. Frie man, the distinguished Chicago nov ist.*

Modern pharmacy has given us rem dies that are new and valuable in t treatment of diseases and some that a not so successful. Doctor, let us ha some of your recent experiences.

Selections From Our Exchanges.

Another Factor in the Distribution of Typhoid Infection (Editorial *Ther. Gaz.*).—Strictly speaking a consideration of prophylaxis hardly finds a place in the editorial colums of a journal devoted to treatment, yet, on the other hand, it is quite as much the function of the physician to prevent illness as to modify it. Our readers are probably well acquainted with some of the researches which have been made within the last few years as to the additional means by which typhoid infection may be conveyed from patient to patient. First, we learned that contaminated water was the most frequent cause of the transmission of typhoid fever; and then that oysters and other shell fish might readily convey the typhoid infection; again, that milk placed in cans that hav been washed with infected water ofte spreads the disease; and still more re cently the Spanish-American war an the researches of Dr. Coplin have prov ed to us that flies frequently carry th typhoid bacillus from the discharges o the sick to the food of the well. Stil more recently, we have noted with in terest in *Medicine* for June, 1903, tha Dr. Engelmann, of Chicago, points ou that cockroaches may carry the infec tion. It is manifest, therefore, that th proper means of preventing typhoid lie in the complete and absolute disinfec tion or destruction of the fecal and uri nary discharges of all typhoid fever pa tients, and it is only by this means tha we can hope to materially modify the

evalence of this dreadful and all too equent disease.

The Physiological Generation Cycle Woman—(Canadian Medical Association—Report from *Prat. and Rev.*)—Dr. Jennie G Drennan, St. homas, Ont., said that we can see in e process of evolution that structure determined and preceded by function d function by environment. Thus in e generative system changes due to anges in environment occur. Adaption and heredity are the two factors hich cause the changes wrought by olution. Thus evolution works both ckward and forward. The physiogic generative cycle is comprised of ree factors, ovulation, pregnancy and ctation. These follow each other in ysiologic sequence, one being cometed before another begins. Every ysiologic process is accompanied by physiologic hyperemia, and so during e different periods the circulation is creased in that organ, which is functnally active. If from any cause a ger amount of blood is directed to a n-active organ the active organ is deived of some of its normal blood supy and its function is lessened.

Ovulation, with its tending sexual citement, is to the mammal what ossoming is to the plant, an evidence the part of each that a seed is ready r impregnation. Fecundation norally should follow ovulation, then egnancy and lactation. This is the ysiologic cycle in mammals, and the imitive human female. But in the oman of civilization this cycle is interpted by a lesser, a monthly one, consting of ovulation and menstruation. his is a pathologic condition arising om non-adherence to natural law. In imitive woman this lesser cycle occurs ly occasionally and does not interfere with the larger cycle, but as the scale of civilization is ascended the reverse is the case. Civilization precedes menstruation. Every menstruation is a sign of a disappointed pregnancy. The human female has thirteen of the periods in a year; why this frequency in an animal whose offspring requires longer time for development *in utero* and for sustenance after birth? Should one not naturally expect ovulation to occur at much longer intervals? Such would be the case if natural law had been and were now obeyed; if an adaptation to a pernicious environment had not occurred.

In mammals and primitive woman ovulation occurs at distinct periods of the year and at no other time. Mating with the primitive woman was much like that of the brute creation now; as soon as she was sexually mature she married and entered on the physiological cycle of a mammal, one factor of this cycle following another as night follows day and day night. As she nourished her child about two years, the length of the cycle would be about three. Primitive people do not produce large families.

In the married aspirant to civilization a disrespect to natural law has arisen, and error has been handed down. As a race becomes more artificial in its mode of life it becomes a more sexually inclined race; every factor in life is then sought as a source of pleasure. The sexual element becomes adapted to the new start of life; the function of the ovary is increased and ovulation becomes a monthly phenomenon and the lesser cycle predominates.

Likely Diagnosis.— Doctor: "You have some sort of poison in your system." Patient: "Shouldn't wonder What was the last stuff you gave me?"

Organic Iron Medication in Secondary Anaemias—A Clinical and Hematological Study.

By Lino S Chibas, M. D , Senior Assistant House Physician, Columbus Hospital, New York, and G. A. DeSantos Saxe, M. D , Assistant Pathologist to the Columbus Hospital, New York.

A great deal has been written in recent years on the value of the various new organic iron compounds in the treatment of anaemia, and our only excuse for the presentation of this report is that every new series of clinical observations, made with due conservatism and accurately recorded, is of value in confirming or disproving some fact or theory in medicine.

The problem of treating secondary anaemias is an interesting one. In each case there is, in the first place, the primary factor, be it loss of blood through hemorrhage, spontaneour or traumatic; or be it the lowering of the functional activity of the blood-forming organs wrought by disease somewhere in the body, or by the action of toxins; or the direct destruction of the red cells and their hemoglobin in the circulating blood by some more violent toxic agency.

The first question, therefore, is how to remove the primary factor, or, at least, how to arrest its influence on the state of the blood. The second is, how to improve the state of the blood, so as to give it a new lease of life by increasing the amount of hemoglobin—that prime agent of oxygen exchange—and the number of red cells, the carriers of this agent.

In each individual case of secondary anæmia there are different articles to be overcome as regards the primary factor, and, therefore, the treatment of the primary disease varies; but thera of the secondary condition is alike all cases. Iron and its assistant, ma ganese, are the specifics to which must have recourse—of that there h long since been no doubt—but the fo of iron that should be used for this pu pose is another question.

The problem as to the exact site a mode of absorption of iron which is a ministered therapeutically has occupi pharmacologists for a number of yea and a great deal has been written on t subject, and yet there is still no agre ment as regards some of the essenti points of this question. Is iron a sorbed at all in the inorganic state? so, in what form and in what quant ties? How does iron act, if it is n absorbed, or if only infitesimal amount totally inadequate for the needs of th body, enter the plasma and are taken u by the molecules of the hemoglobin? A these questions have been discussed an re-discussed, but as yet, as Hammer sten(1) says: "The action of the iro salts is obscure."

In a clinical article we are not calle upon to go into details in discussing th various phases of the question as th absorption and mode of action of th iron salts, but a few words may be sai to show the present status of the sub ject.

Whether iron compounds of the inorganic group are absorbed at all, is a question of subsidiary interest in the present inquiry. There are two diametrically opposite views on this question. Bunge and his pupils(2) say that inorganic iron salts are not absorbed in any amout, however small, and that Blaud's pills and similar preparations act only by combining with

e hydrogen sulphide and the alkaline lphides of the intestine, thus preventg the decomposition of the organic mpounds of iron existing in our food, pecially in vegetables, and so permitng the absorption of these compounds to the blood. The opposite view is ld by Quincke(3) and others, but e balance of evidence is in favor of unge's hypothesis(4). The well own fact that enormous doses of iron e required to produce appreciable efcts in chlorosis supports this theory. us, if a woman takes six grains of reced iron three times a day (eighteen rains daily), it will take weeks to reore her to the normal condition, if her moglobin has fallen to 50 per cent. nd yet, the entire amount of iron in e blood of a normal woman of averge weight is only thirty grains, so that the inorganic iron were absorbed, as me observers claim, a few days would ffice to restore the balance of hemogbin and red cells.

On the other hand, organic iron comounds, especially such as are composed iron with a proteid substance that sembles as closely as possible the proids of the food as they occur in the instine (*e. g.*, peptones), are undoubtlly absorbed into the blood in suffient amounts to produce a comparavely speedy thereapeutic effect in anmia, without injuring, as the inorgan compounds often do, the epithelial overing of the stomach and intestine, id thus causing gatro-intestinal symptms summarized under the two general eadings of dyspepsia and constipation. It is these advantages that led to the eneral adoption of the iron peptonates, buminates, etc., as the remedies to be referred in the treatment of anæmia. n this report we deal with one of these reparations, that known as pepto-manan, Gude, in which iron and manganese exists in the form of peptonates. Gude's pepto-mangan has been used for a long time at the Columbus Hospital, as a matter of routine in all anæmic patients during convalescence from prolonged illness or from operations.. The satisfactory results which have been obtained with this preparation have been noted, in a general way, by the visiting staff as well as by the house physicians, but until now we had made no study of the exact results, as attested by the examination of the blood before and after the initiation of the treatment.

In order to determine more acurately what could be expected of pepto-mangain insecondary anaemia as they occur in a general hospital, we studied a number of cases in the medical, surgical and gynecological wards. Of these a majority were in the services of Drs. Ramon Guiteras and Egbert H. Grandin, visiting surgeon and visiting gynecologist to the hospital, and take this opportunity to acknoledge their courtesy in permitting us to pursue this work.

About forty cases were studied from October, 1902, to March 1, 1903, in as thorough manner as possible, with a view of determining the action of the preparation to be tested. Unfortunately, for reasons beyond our control, a great many of these patients left the hospital, believing themselves sufficientup improved, without giving us time to try the remedy for a sufficient period to obtain definite results. We present, however, twelve cases, in which the medication was continued for three or more weeks, usually for about a month in each instance. In each of these cases blood-counts were made before the beginning the treatment, as well as after it had been discontinued. The cases are given below, simply as they appeared in our notes, and they were not selected particularly on account of the

results noted, but merely because they were the cases studied more completely than the rest.

REPORT OF CASES.

CASE 1. Mrs. R. F., Italian, 42 years of age, was admitted to the hospital on December 4th. Diagnosis, ovarian cyst. Symptoms of secondary anaemia. She was operated upon December 5th and the uterus was removed through the abdominal incision, as it was found to be the seat of a fibroid tumor which had degenerated into sarcoma. She was discharged cured on January 10, 1903. During her convalescence she took one tablespoonful of pepto-mangan (Gude) three time daily. The examination of the blood showed the following findings:

December 4, hemoglobin 50 per cent., reds 3,350,000, whites 15,000. December 18, after hysterectomy, hemoglobin 39 per cent., reds 2,300,000, whites 16,000. January 10, hemoglobin 70 per cent., reds 4,250,000, whites 7,800.

The patient left the hospital in an excellent condition, showing no signs of anaemia or debility.

CASE 2. A. P., Italian, 25 years old, admitted November 17th, with stricture of the urethra and signs of marked anaemia. November 24th, perineal section and internal urethrotomy for stricture. There was considerable hemorrhage during and for a few days after the operation.

Examination of blood: December 12, eighteen days after operation, hemoglobin 68 per cent., reds 3,700,000, whites 10,429. January 4, 1903, twenty-eight days after beginning the use of pepto-mangan, hemoglobin 95 per cent., reds 4,800,000, whites 8,400.

Pepto-mangan was given in doses of one tablespoonful three times daily from December 13th to January 10th. The patient was discharged cured on January 10th, in good general condition.

CASE 3. M. S., Italian, 25 years c admitted October 14th. The diagno was perinephritic abscess and tuberc lous knee joint, and the patient show pallor of the skin and mucous me branes. He was operated upon by lu bar incision for perinephritic abscess October 24th, and his knee joint w excised December 18th.

Examination of blood: December 1 1902, three weeks after first operatic hemoglobin 70 per cent., reds 3,104,0 whites 5,888. December 20, 1902, t days after excision of joint, hemoglol 70 per cent., reds 2,750,000, whites 2 000. January 10th, when discharge hemoglobin 85 per cent., reds 4,640,00 whites 5,150.

This patient was given pepto-ma gan for three weeks from December to January 10. He was discharged in proved in general health. The anaem was very marked on December 20th a ter the second operation, and the i crease in the blood cells and hemoglobi was very satisfactory for a case of th severity after three weeks' treatment.

CASE 4. Ida M., 5 years old, Italia parents, born in the United States, wa admitted November 30, 1902, sufferin from typhoid fever. December 12th after the convalescence had set in, th child was extremely anaemic-looking with pale skin and pale, bluish-red mu cous membranes. Pepto-mangan wa ordered, a teaspoonful three times daily on December 12th. Eight days later th first blood examination was made two weeks later, the second. The find ings of the pathologist were as follows

December 20th, hemoglobin 75 pe cent., reds 4,720,000, whites 30,000 January 8th, hemoglobin 85 per cent. reds 4,960,000, whites 9,200. The pa-

nt was discharged cured on January
1.

Case 5. Cecare C., aged 25 years, igle. Had been operated upon one ar ago in South America for vesical lculus and urethral stricture. Was mitted December 3, 1902, complain- g of inability to urinate and continu- s dribbling of urine through a supra- bic fistula. December 13th, perineal ction without a guide and internal ethrotomy were performed. The pa- nt was weak and anaemic after the eration, so pepto-mangan, a table- ponful three times daily, was pre- ibed on February 5, 1903. He made good recovery from the perineal op- ation, but the supra-pubic fistula per- ted. After twenty-two days' treat- nt with pepto-mangan he was dis- arged improved.

Examination of blood: February 6, 03, hemoglobin 80 per cent., reds 78,000, whites 4,250. February 28, 03, hemoglobin 85 per cent., reds 16,000, whites 4,600.

Case 6. M. C., aged 44 years, wid- er, has had urethritis four times. On mission he gave a history of having ffered from frequent and painful mic- ition for fifteen months. An exam- ation showed a chronic urethral dis- arge, a urethral stricture, 12 F. at ut 6½ inches from the meatus, and a mor in the right umbilical region ulating a very large kidney. The ostate was much enlarged and very dder. The urine was of a specific avity of 1.020, acid in reaction, con- ned no sugar and no albumin, but merous pus cells. In addition to treat- nt by irrigations and by dilatation of e structure, he received pepto-man- n, a tablespoonful three times daily, m February 4th to February 28th, to abat a marked anaemia.

Examination of the blood: February 5th, hemoglobin 45 per cent., reds 2,- 149,000, whites 9,760. February 28th, hemoglobin 55 per cent., reds 2,460,- 000, whites 6,890.

The patient improved as regards his urinary symptoms, but his anaemia did not show much amelioration after twenty-three days of iron therapy. At the time of writing he was to be prepared for a second operation, an exploratory nephrotomy for his renal tumor.

Case 7. A. B., Italian, aged 58 years, married, was admitted to the hospital on November 24, 1902, complaining of symptoms of enlarged prostate which had been giving trouble for six months. He had lost considerable flesh and strength and looked very anaemic. He was operated upon December 27th. His convalescence progressed satisfactory as regards his urinary symptoms, but the anaemia persisted, and on January 14th he was put on a tablespoonful of pepto-mangan three times daily. After twenty-five days of this treatment he was discharged somewhat improved as regards the anaemia. The report of the two blood examinations before and after the use of pepto-mangan was as follows:

January 15, 1903, hemoglobin 55 per cent., reds 2,940,000, whites 8,300. February 9, 1903, hemoglobin 65 per cent., reds 3,110,000, whites 8,100.

Case 8. A. D., 8 years old, school girl, on admission to the hospital, September 22, 1902, complained chiefly of abdominal pain, general weakness, and enlargement of the abdomen. On September 24th, the abdomen was opened, and the peritoneal cavity found to contain a large number of tuberculous foci on the peritoneum and a considerable amount of serous fluid. The diagnosis of tuberculous peritonitis was made.

On January 27, 1903, the abdomen was again found full of fluid, and was

opened for the second time. On January 28th the patient was given pepto-mangan, two teaspoonfuls three times daily, for twenty-nine days, at the end of which time she was discharged. The anaemia had not improved. The reports of the blood examinations were as follows:

January 29, 1903, hemoglobin 75 per cent., reds 3,920,000, whites 10,000. February 27, 1903, hemoglobin 75 per cent., reds 3,890,000, whites 7,200.

Case 9. G. P., Italian, 28 years old, was admitted to the hospital on January 13, 1903. For the last four months he had noticed a swelling of the left testicle. He had his scrotum tapped ten days before admission, and about five ounces of a clear fluid had been withdrawn. An examination showed a pyriform swelling about eight times larger than the normal testicle, with an apex above the external ring. Its upper part was hard, without fluctuation, dull on percussion, no impulse on coughing and non-translucent. Its lower part fluctuated and was translucent. On January 19, 1903, the testicle was removed, the diagnosis of sarcoma of the testis being afterwards confirmed by microscopical examination. On February 1st the patient was given pepto-mangan in doses of a tablespoonful three times daily, and this medication was continued until February 28th, when he was discharged with a well healed wound and improvement of anaemia. The reports of the blood examinations were as follows:

February 5, 1903, hemoglobin 65 per cent., reds 2,362,600, whites 5,900. February 28, 1903, hemoglobin 70 per cent., reds 3,800,000, whites 7,000.

Case 10. L. M., born in United States, aged 25 years, was admitted to the hospital January 3, 1903. She had been married four years, had had one child and one miscarriage. No venereal history. One month before admissi she was exposed to cold during m struation, and the flow ceased. C week before admission she began flow steadily and still continued to so at her entrance to the hospital. S has had severe pelvic pains for thr weeks. The uterus was found retr flexed, and a large doughy mass w found on the left side posteriorly. (January 9, 1903, she was operated up by posterior vaginal section. A su purating hematocele originating from ruptured extrauterine pregnancy w found in the left broad ligament. S was given pepto-mangan in doses o tablespoonful, three times daily, fr January 10, 1903, to February 9, 19 The patient was discharged cured February 9th. The reports of the blo examinations were as follows:

January 24th, hemoglobin 65 p cent., reds 3,150,000, whites 9,200. Fe ruary 9th, hemoglobin 75 per cent., re 4 318,000, whites 6,100.

Case 11. Mrs. L. G., Italian, years of age, married six years, 3 par last child three years ago. Admitte January 15, 1903, on the recommend tion of her family physician, who ha made the diagnosis of ovarian cyst. C admission a careful examination wa made and she was found to be pregna in the eighth month. The woman wa delivered in the hospital on Februa 12, 1903, the labor being normal, bu accompanied with considerable hemo rhage, leaving the patient markedly an aemic, as she had been previously su fering from anaemia during her preg nancy. Pepto-mangan was given her i doses of a tablespoonful three time daily from January 25th to Februar 28th, when she was discharged cure The reports of the blood examination were as follows:

January 29th, hemoglobin 55 pe

nt., reds 3,126,000, whites 8,450.
ebruary 28th, hemoglobin 75 per cent.,
ds 4,390,000, whites 6,000.

Case 12. G. G., Italian, 44 years,
ngle, was admitted to the hospital on
ovember 26, 1902. He is accustomed
smoke a pipe. For the past fourteen
nths he has had a sore on his lower
, which gradually grew larger. At
nes it gave rise to a great deal of pain.
n examination, a small growth was
und in the median line of the lower
, hard in consistence, ulcerating, and
th slight infiltration of the surround-
g tissues. The sublingual and servi-
glands were not enlarged. The
owth was removed by a V-shaped in-
ion on December 10, 1902. A moder-
degree of anaemia remained after
operation, and on February 6, 1903,
patient was given pepto-mangan, in
ses of a tablespoonful three times
ly. This medication was continued
til March 5, 1903, when the patient
s discharged cured. The microscopi-
examination of the growth showed
o be an epithelioma. The reports of
blood examinations were as follows:
February 6, 1903, hemoglobin 70 per
t., reds 3,219,000, whites 8,318.
rch 5, 1903, hemoglobin 85 per cent.,
s 4,890,000, whites 7,000.

On reviewing the results obtained, we
l that, considering the diversity of
es studied under the influence of
pto-mangan, the ratio of increase in
hemoglobin and red cells was very
form. In one case only (8) of the
lve studied in detail, there was no
provement noted in the anaemia, and
t was a hopeless case of tuberculous
itonitis, in which, however, the pa-
nt was discharged improved as re-
ds her abdominal symptoms after
ration. In another case (6) the im-
vement was but slight, but this was
atient with renal tumor, and a mark-
ed cachexia. These two cases were as severe tests as an iron preparation could be subjected to, and perhaps the paucity of the results is not to be wondered at in these instances.

In the remaining ten cases reported here the results were very satisfactory for the short duration of the treatment. There is no question that a few weeks longer would have brought most of the "improved" cases up to the point where we could say that the anaemia was "cured." But unfortunately our patients belonged to a class in which every day spent in a hospital counts in privations for others who depend upon them, and we have been often obliged, upon the insistent demands of the patients and their friends, to discharge the convalescents at the earliest possible date.

In addition to the forty-odd cases which we studied this winter, pepto-mangan has been used in the hospital for over two years in anaemic convalescents, with uniformly satisfactory results. In none of the cases under our observation did any untoward symptoms accompany or follow the use of this preparation. In no case did constipation, nausea, headache, or digestive difficulties follow its administration.

The results recorded here correspond with those obtained with the use of pepto-mangan by Loomis, Van Schaick, and Von Ramhoh, of New York; Peterson, Perekhan, Doering, of Chicago; Wolffe, of Philadelphia; Summa and Bauduy, of St. Louis; Von Ruck, of Asheville, N. C.; McGuire, of Richmond, Va.; Frieser and Pohl, of Vienna, and Fasano, of Naples.

On the whole, therefore, we have found pepto-mangan a very satisfactory and efficient hematinic in secondary anaemias.

As a remedy in diseases of the mucous surfaces, S. H. Kennedy's Extract of Pinus Canadensis has successfully passed through the crucial test of practical experience. Recent observers have given it a place far in advance of that class of mineral astringents which have hitherto held a front rank in the treatment of mucous discharges, "especially vaginal and urethral," sores, ulcers, piles, sore throat, nasal catarrh, dysentery, diarrhea, and hemorrhages. While not altogether a new remedy, medical textbooks have nevertheless thus far considered it in a very brief and cursory manner, and the great favor it now enjoys among those who have used it has not yet extended, we believe, throughout the medical profession in its entireness. A knowledge of its merits should be, therefore, more thoroughly disseminated, since an intimate acquaintance with its virtues means an improved method of treatment of disease heretofore particularly obstinate and intractable.

Poor Dewey.—"It's too bad," said Mrs. Corntossell. "What's the matter? inquired her husband. "I'm kind o' sorry for Mr. Dewey. He seems to be a nice accommodatin' man, who wouldn't want to hurt any one's. But if he drinks all the drinks an' wears all the clothes that have been named after him he's goin' to be mighty uncomfortable."—*Washington Evening Star.*

Further Report on Chaparrin.—Halman Taylor reports on Chaparrin as follows: "I have used Chaparrin and am highly pleased with its action. I have had prompt and most gratifying results from its local application in the following cases: Sacbies, tinea, chancroid and various other skin troubles of an indefinite type. I have used it in several cases very much resembl true eczema, and so successfully t the third application was rarely nec sary. I may add that I do not kn of the return of the trouble in a sin one of these cases, a period of seve months having elapsed since some them were treated.

"I am fast learning to depend up Chaparrin as upon few other remed in the treatment of a very vexatio class of diseases."

So many favorable reports have be made on Chaparrin that its value dermatological practice is generally r ognized. Its action, particularly in p asitic skin diseases, is rapidly curati all itching and irritation being quick relieved. Reports and further info mation on Chaparrin can be secur from the Matthewson Laboratory, Marshall, Texas.

Deliberate.—"You villagers seem be rather a deliberate lot of people." s'pose we be. There wuz a fell drowned down in the creek a spell ag He yelled 'Help, help!' afore he we down th' last time, an' th' editor of t village paper heard him an' went ba to the office an' put in his paper tw 'help wanted' ads. an' charged 'em t to th' estate, by gum!"—*Cleveland Plain Dealer.*

Glyco-Thymoline as a Therapeutic Agent in Treatment of Nasal Catarrh —(By Erle B. Woodward, M. D., Lincoln, Neb.)—*Atrophic Rhinitis*—Mrs. P., aged 38, bothered with catarrh from girlhood. Applied for treatment February 12, 1900, because of excessive dryness and itching of nares. Upon examination, found the turbinates very much reduced in size. Discharge dried into crusts which clung to both septum

(*Continued on Page* 590.)

The Sumbul Series

No. 2

In our advertisement of Series No. 1 we gave some valuable formulas and expatiated on our expert experience in preparing Sumbul, at the same time dilated upon the therapeutic value of the drug.

We reiterate there are none so good as

WM. R. WARNER & CO.'S.

The following recipes may interest our readers

TABLETS ONO-NERVINE

WARNER

Ext. Sumbul,	1-2 gr.
Phosphorus,	1-100 gr.
Ext. Damiana,	1 gr.
Ferri Carb.	1 gr.
Asafetida,	1-2 gr.
Ext. Nux Vom.	1-10 gr.

In each tablet.

A VALUABLE TONIC

TONO SUMBUL CORDIAL

THE IDEAL TONIC

12 oz. bottles only.

—FOR—

PHYSICIANS PRESCRIPTIONS

PIL. SEDATIVE

WARNER

℞

Ext. Sumbul,	1-2 gr.
Ext. Valerian,	1-2 gr.
Ext. Henbane,	1-2 gr.
Ext. Cannab. Ind.	1-10 gr.

In each pill.

A VALUABLE SEDATIVE

Specify Warner & Co. when you prescribe and avoid disappointments

WM. R. WARNER & CO. MANUFACTURING PHARMACEUTISTS

PHILADELPHIA NEW YORK CHICAGO NEW ORLEANS

Leg Ulcers.—The treatment of ulcers of the leg, according to Fischkin, in *Med. Standard,* consists, 1, in the removal of conditions which may induce or favor necrosis; 2, the production of conditions which will favor the healing process as much as possible. The general outline of treatment consists, according to the author, in:

1. Aseptic cleansing of the leg.

2. Elevation of the leg and application of bandages to remove the venous stasis.

3. The application of remedial agents to induce healthy granulations.

4. The application of such remedies as will favor normal cornification.

5. The application of such remedies to surrounding tissues with a view to healing associated conditions, such as eczema, which may be caused by venous stasis.

In carrying out the first indication the leg should be bathed with soap and water unless great eczema is present, in which case alcohol dressings may be used, or a boric acid or 5 per cent. liquor alum. acetatis or a solution of hydrogen peroxide may be substituted.

These indolent, anemic ulcers must be stimulated in order to promote the formation of healthy granulations. This may be done by syringing the ulcer with hot water or a 1 to 2,000 potassium permanganate solution. This syringing should be followed by an iodoform dressing or the base of the ulcer painted with pure tincture of iodin or the application of unguentum hydrarg. rubrum, balsam of Peru or other stimulating remedies.

If the granulations project too high, caustics and astringents must be applied, such as argenti nitras, 10 p cent. Gangrenous ulcers are to be fi cleansed with a hot potassium perma ganate solution, followed by the app cation of a few drops of the followi combination:

℞. Chloralis hydratis.....ʒiiss 10
Camphoræ.....ʒiss 6
Glycerini.....ʒiss 45
M. Sig.: Apply locally.

An iodoform dressing is then applie

Epithelization and cornification m be encouraged by carefully dressing t ulcer and producing drainage in ord to prevent the accumulation of the s cretion; or the base of the ulcer shou be painted with a 2 to 4 per cent. sol tion silver nitrate followed by bismut subnitrate dermatol or ichthofor dressing. The ulcer is then covere with a guttapercha dressing to ai drainage and to prevent the adhesion of dressings. The surrounding ecze mas must be treated. If the eruptio is vesicular or in the stage of serou discharge pastes must not be employed but in their stead a dry powder as fol lows:

℞ Zinci oxidi
Talci venet.
Amyli, aa .....ʒiiss 10
Acidi Borici.....gr. xlv 3
M. Sig.: Apply locally.

In the dry form of eczema some tar preparation is better, as follows:

℞ Olei cadini
Olei rusci
Spiritus
Spts. etheris, aa.....ʒiiss 10
M. Sig.: Apply locally.

The author also recommends Unna's paste, prepared as follows:

℞ Zinci oxidi .....ʒx 40
Gelatin .....ʒv 20
Glycerini .....ʒi 30
Aq. destil..... ....ʒiiss 75
M Sig: Apply locally with a soft brush, changing the dressing in 3 to 10 days.

Worth Investigating

The successful treatment of consumption, scrofula, and wasting diseases generally, is a subject in which every physician is deeply interested. Hydroleine (hydrated oil) simplifies the question to a remarkable degree.

As a food for fat-starved tissues, nothing is equal to cod-liver oil, and Hydroleine is a preparation of the oil which insures its complete assimilation, because it is pre-digested by the use of pancreatine. It is stable, unirritating and free from rancidity, containing only the purest oil preserved by a minute quantity of salicylic acid; and through the agency of soda the pancreatine is protected from neutralization by the acids of the stomach.

In short, Hydroleine is prepared in strict conformity with the true principles of the digestion of fats and is unequaled

As a Producer of Weight and Strength

Sold by druggists generally.

THE CHARLES N. CRITTENTON CO., 115-117 Fulton Street, New York.
Sole Agents for the United States.

Samples free to physicians.

When writing advertisers please mention this Journal.

In the ordinary ulcers, accompanied by pain, the following is recommended as a dressing:

R	Tinct. benzoini comp	ʒiv	15
	Balsami peru	oz. ii	8
	Lanolini	oz. x	40
	Ext. belladonnæ	gr xxx	2
M.	Ft. unguentum S'g: Apply locally.		

As a local application in syphilitic ulcer, the author recommends the mercurial plaster; or if the ulcer is not clean bathe with a mercurial bath and dust with calomel. Iodids should be given internally.

Some authors recommend the following combination in the treatment of syphlitic ulcers:

R	Hydrarg chloridi mitis	oz i	4
	Ichthoformi	oz. ss	2
	Petrolati	oz. viss	26
M.	Sig.: Apply locally. or:		
R	Iodol	drs. i	30
Sig.: Apply freely to the ulcer			

(*Continued from Page* 586.)

and turbinates. As to odor—this case was no exception to its class. I gave her Glyco-Thymoline to use as a coarse spray three time a day, or as much oftener as she required. While it gave her great relief, her case did not progress as fast as we thought it ought, so I had her come to the office three times a week, where I cleansed nose thoroughly with hydrogen peroxide and afterwards sprayed with Glyco-Thymoline. Finally I made a very thorough application of balsam of Peru, the Glyco-Thymoline to be continued at home as before. Before the end of one month crust and the disagreeable odor were matters of the past. The whole nostril had a very much more healthy appearance. I saw this case a few days ago and she tells me that she is comfortable, but always keeps a bottle of the red medicine on hand. I cannot say this case is cured, but I believe she is as nearly cured as such a case ever gets.

In Kansas.—"Here's an example how familiarity breeds contempt," said, as he looked over the top of paper at the rest of the family. "Wh is it?" "This is a Kansas paper, a under the head of 'Local Jottings' says: 'Three or four cyclones ripp through the village since our last issu —*Detriot Free Press.*

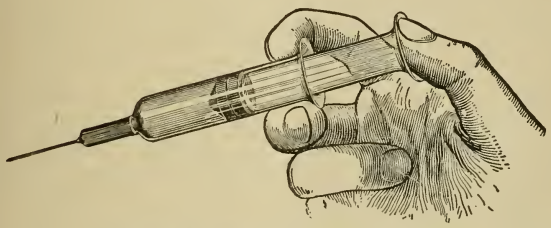
The Treatment of Symptoms.—In highly interesting article on this su ject, Walter M. Fleming, A. M., M. I of New York city, uses the followi language:

"Long experience in the treatment diseases in their incipiency, evidenc beyond all debate that almost invari bly the attack in a large proportion cases is inaugurated by febrile sym toms of greater or lesser severity. A so, it may be noticed that constipatic or torpid inactivity of the bowels pr vails. Therefore, the first indication i the incubation or incipiency of the a tack of almost any form or nature, primarily to allay the fever, pain-ne vousness and solicitude of the patien and secondarily to empty the alimentar canal. These two ends being accom plished, a long advance towards a pos sible abortive issue of the attack ha been made, or in any event, the first in dication and requirements are fulfille in proper progress toward a cure.

"Thus in the primary treatment o the numerous ills, which are character ized by the above quoted symptoms, th physician will find Laxative Antikam nia and Quinine Tablets at once handy convenient and reliable, safe and sure and to which the turbulent symptom of fever, constipation, pain-sleepless ness, nausea and generally wretched de pression yield so promptly and grace fully, that it is certainly refreshing to

Mulford's New Antitoxin Syringe

Is the Most Convenient and Scientific Method of Administering Antitoxin Yet Devised



Every Dose Furnished in this Aseptic Glass Syringe Ready for Instant Use. No Advance in Price

"Saves Most Lives"

H. K. MULFORD COMPANY, Chemists

PHILADELPHIA

NEW YORK, CHICAGO, SAN FRANCISCO, ST. LOUIS, TORONTO

the physician himself to note the change in his patient from suffering and solicitude to comfort and quiet. I certainly know of no other remedy which will so readily and decisively allay and control the symptoms above enumerated."

In Philadelphia.—Aeronaut: "I am going to Philadelphia next week to give a balloon ascension and want some handbills printed." Now York Printer.—"Yes, sir; how would this do?—'Professor Parryshoot will rise from the dead at 4:30. sharp,"—*Puck*.

Sharp & Dohme Re-Incorporoated.—The old corporation of Sharp & Dohme is to be wound up and the business transferred to a new and larger Jersey company, which is being organized. The capital stock is increased from $500,000 to $1,500,000. This re-adjustment does not indicate any material change in the present condition of of affairs; the same business on a larger scale will be continued in the same way by the same people. Large and extensive alterations and additions will be made to the laboratory in order to keep up with the rapid growth of the business.

The Proposal.—John (sheepishly): "I—I s'pose you'll be gittin' married some time?"

Betty (with a frightened air): "Oh, I dare say I shall some time."

John: "I dare say I'll git married, too."

Betty: "Oh."

John: "P'r'aps we might both git married at the same time."

Betty: "Wouldn't it be awful, John, if the parson should make a mistake and marry us to each other?"

John: "I—I shouldn't mind."

Betty: "No—neither should I, tell you the truth, John."—*Tit-Bits.*

In prescribing the products of manufacturing pharmacists, we should guarded to a great extent by the business standing of the manufacturers. N other house in the South or West has better reputation for strict integri than the Robinson-Petett Compan Louisville, Ky. We not hesitate recommend the preparations advertis by them in this issue.

Dr. Lewis S. McMurtry, of Louisville, delivered the address on surge before the South Carolina Medical A sociation at its recent meeting i Charleston. He chose for his subje fibroid tumors of the uterus and the complications.

It is a Bad Habit to whip up the waning physiologic functions of elderl people with strychnine or alcohol; afte a short time the deleterious reaction i more certain than the primary stimula tion. These patients need help of character not furnished by a powerfu stimulant—their functions need gentl reinforcement and, experience proves the best agent for this purpose is Gray's Glycerine Tonic. The atonic digestive disturbances, almost constantly present in old age, are promptly overcome by the use of Gray's Tonic. It stimulates the enfeebled digestive glands to secrete abundant supply of gastric juice. This in turn assist the assililation of food and improves the general nutrition. Then too, these patients feel better because the remedy acts as a prop to the entire system; they are less languid are not so easily fatigued upon exertion and are mentally more alert. Many physicians report that the routine employment of

ay's Tonic in those patients in whom e present the signs and symptoms of l age, imparts a degree of comfort d well-being, free from after effects, t obtainable from any other medica- n; one physician states, "It picks em up and holds them together."

Another strong reason for the use Gray's Tonic in elderly people is at it wards off the tendency to inflam- ation of the respiratory organs; this ct has been noted and commented on for many years past and is doubt- s due to the fortifying action of the nedy upon the general constitution d its specific influence upon the respi- ory tract.

Experience shows that it is good actice to administer Gray's Tonic to patients in whom are noticeable the mptoms due to advancing years. The solute freedom of the remedy from pressing or other detrimental reac- n makes it the safest and most pre- rable means of combatting the ex- ustion and enfeeblement of age.

Malaria and Mosquitoes.—Keep in nd the demonstrated fact that mos- itoes transmit malaria and that they n be exterminated by draining or oil- g every ten days all stagnant pools in neighborhood, and by seeing that ter is not allowed to stand in bar- s, etc.

The Pennsylvania State Board of ealth and "Vin Mariani."—On April d last the Governor of Pennsylvania proved an excellent law passed by the gislature, entitled "An Act regula- g the sale or prescription of cocaine, of any patent or proprietary remedy ntaining cocaine, and prescribing for nalties for violation thereof." A estion arose as to whether the well-

DOCTOR:

HAVE YOU USED LEU-KRE-TOL

THE NEW ANTISEPTIC COMPOUND?

The Formula combines, under heavy trituration, the following drugs: Acinum Boracicum, Acidum Carbolicum, Menthol, Hydrastine Sulphas, Sodii Boras, Alumen, and Glycerinum. The powder will readily go into solution and is not only an Ethical, Scientific Pharmaceutical product, but also a pleasant, nor irritating and efficient preparation.

PHYSIOLOGICAL ACTION:

Antiseptic, Disinfectant, Deodorizer, Astringent and Antiphlogistic, reducing inflammatory exudates by its exosmotic action.

THERAPEUTICAL INDICATIONS:

Catarrhal conditions of nose and throat, tonsillitis, pharyngitis, hoarseness, etc. Usual ℞ being (Leu-Kretol ʒ i Glycerine ʒ iv Aquæ Q S. ʒ vi) either as Douche or Spray.

VAGINAL DOUCHE:

Especially valuable in Leucorrhoea, Vaginitis, Urethritis, Gonorrhœa, Pruritus, Septic conditions of Puerperal State, (being a superior remedy to Creolina, etc..) and in all offensive Uterine and Vaginal discharges. (ʒ i to 1 Qt. of hot water.) Samples and literature on request.

Don't forget the name LEU-KRE-TOL.

Manufactured by the

LEU-KRE-TOL CHEMICAL CO.

Baltimore, Md.

Branch

Winston-Satem, N. C.

known "Vin Mariani," as a coca preparation, contained cocaine. The State Board of Health, on being appealed to, submitted the question to the analytical chemists, Prof. Sadtler and Dr. Genth, the samples examined being purchased by them in drug stores of their own selection. The analysis showed that "Vin Mariani" contained no cocaine.—*Monthly Cyclopædia of Practical Medicine, Phila., Sept.*, 1903.

Where He Was.—"Mr. White," said a lawyer to a witness in the box, "at the time these papers were executed you were speculating, were you not?" "Yes, sir." "Were you in oil?" "I was." "And what are you now in?" "Bankruptcy." was the solemn reply.—*Tit-Bits.*

When your cases of nervous indigestion do not "get on well," write thus:

R. Glycerine Prosphate, oz. vi.

Sig.: Take one teaspoonful in water after meals.

You will be surprised at the results.

Named factors are responsible for the retardation of the heart's action. The reflex action is at first operative, but with the continued accumulation of bile in the blood a direct effect upon the cardiac muscle sooner or later becomes operative.—*Med. Record.*

I use Saline as a basis in almost all my cases, both acute and chronic; in fact I can't practice without it, as it is the easiest and most reliable cathartic I can find.

Dr. Geo. D. Hewitt.
Carthage, N. Y.

"Shall I administer gas before extracting your tooth?" asked the dentist. "Well," answered the fair patient from a back township, "if it doesn't cost a more I'd rather you'd give me elect light."

Dr. G. L. Wimberly, Jr., of Roc Mount, N. C., says: "I have used Ha graves' Iodoform Vapor in cases nasal and bronchial catarrh with d cided benefit, and can heartily endor it in affections of that character. Tl makers of Iodoform Vapor will be plea ed to send any physician a sample bo tle with formula. Address The Ha grave Chemical Co., Wilson, N. C.

"I am feeling very ill again, docto Do you think I am going to die?" "M dear madam, compose yourself. That the last thing in the world that is goin to happen to you."—*Life.*

Can't keep house without the Saline It is the best laxative, purgative an cooling drink I ever used, and whe given in a little sweetened water an handed out while still foaming, th babies literally cry for it and call it soda water.

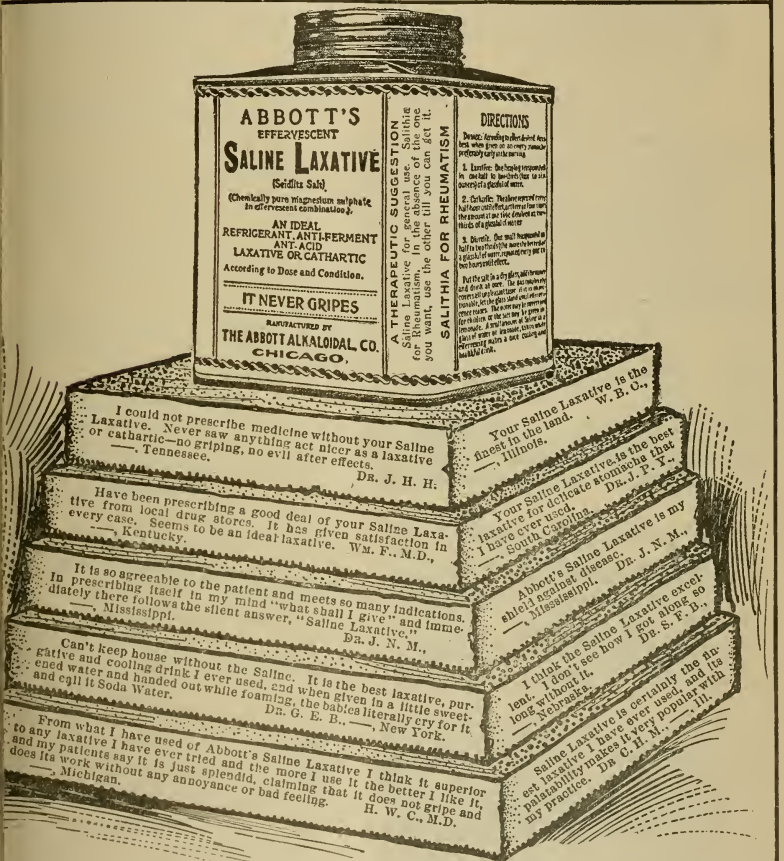
Dr. Geo E. Blackham.
Dunkirk, N. Y.

Hissock—Got the rheumatism, eh? I congratulate you, old boy. Twinger —Congratulate me? Yes, it must be awfully nice to have the rheumatism— there are so many things in the drug market that are good for it, you know.

Local Treatment of Skin Diseases.—For quick results, ease of application and cleanliness in the local treatment of skin diseases, chaparrin has rapidly become a favorite remedy. This product introduced a new dermatological agent, chaparro amargoso, the active principle of a shrub native to Texas and Mexico which in chaparrin is combined chemi-

It Stands on Its Merit

(MONEY BACK IF NOT SATISFIED)


ABBOTT'S
EFFERVESCENT
SALINE LAXATIVE
(Seidlitz Salt)
(Chemically pure magnesium sulphate in effervescent combination).
AN IDEAL
REFRIGERANT, ANTI-FERMENT
ANT-ACID
LAXATIVE OR CATHARTIC
According to Dose and Condition.
IT NEVER GRIPES
MANUFACTURED BY
THE ABBOTT ALKALOIDAL CO.
CHICAGO.
A THERAPEUTIC SUGGESTION
Saline Laxative for the prevention of Salithia for the absence of the one you want, use the other till you can get it.
SALITHIA FOR RHEUMATISM
DIRECTIONS
I could not prescribe medicine without your Saline Laxative. Never saw anything act nicer as a laxative or cathartic—no griping, no evil after effects.
Dr. J. H. H.
—, Tennessee.
Your Saline Laxative is the finest in the land.
W. B. C.,
—, Illinois.
Have been prescribing a good deal of your Saline Laxative from local drug stores. It has given satisfaction in every case. Seems to be an ideal laxative. Wm. F., M.D.,
—, Kentucky.
Your Saline Laxative is the best laxative for delicate stomachs that I have ever used.
Dr. J. P. Y.,
—, South Carolina.
It is so agreeable to the patient and meets so many indications. In prescribing itself in my mind "what shall I give" and immediately there follows the silent answer, "Saline Laxative."
Dr. J. N. M.,
—, Mississippi.
Abbott's Saline Laxative is my shield against disease.
Dr. J. N. M.,
—, Mississippi.
Can't keep house without the Saline. It is the best laxative, purgative and cooling drink I ever used, and when given in a little sweetened water and handed out while foaming, the babies literally cry for it and call it Soda Water.
Dr. G. E. B.,
—, New York.
I think the Saline Laxative excellent. I don't see how I got along so long without it.
Dr. S. F. B.,
—, Nebraska.
From what I have used of Abbott's Saline Laxative I think it superior to any laxative I have ever tried and the more I use it the better I like it, and my patients say it is just splendid, claiming that it does not gripe and does its work without any annoyance or bad feeling.
H. W. C., M.D.
—, Michigan.
Saline Laxative is certainly the best laxative I have ever used, and its palatability makes it very popular with my practice.
Dr. C. H. M.,
—, Illinois.

THE ABBOTT ALKALOIDAL CO.

RAVENSWOOD STATION, CHICAGO

ALL PRINCIPAL JOBBERS AND MOST RETAILERS ARE SUPPLIED. SAMPLES AND PRICES ON REQUEST

e are headquarters for Alkaloidal Preparations

SEND YOUR ORDERS TO THE MOST CONVENIENT POINT.

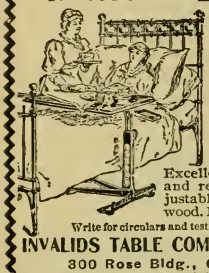
50 West Broadway, N. Y.
13 Phelan Bldg., Frisco.

AGENTS WANTED

Who reside in North or South Carolina, to sell our goods to houses and stores. Money can be made. For terms and particulars address, with reference,

A. M. AKE,
119 Ninth St., Jersey City, N. J.

DID YOU EVER **ENJOY A MEAL IN BED?**



Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient

in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
300 Rose Bldg., CLEVELAND, O

Keeley Cure

For Drunkenness and Drug Using

Please write us. Correspondence confidential.

THE KEELEY INSTITUTE, Dept. K, Greensboro, N. C.

Our Illustrated Handbook Sent Free On Request.

NEURILLA

SOOTHES, CALMS AND REGULATES THE NERVES.

INDISPENSABLE FOR NERVOUSNESS.

No bad effects follow its use.

DAD CHEMICAL CO., NEW YORK.

cally with salicylic acid, phenol a camphor.

Many reports have been receiv which indicate gratifying results fro chaparrin in cases of eczema, psoria tinea and other skin affections.

Chaparrin has also proven to be a va uable remedy in the treatment of da druff; here is it a quick and permane cure when used in the following form

℞ Chaparrin..... ʒ j
Glycerine..... ʒ i j
Myrica spirit.....q. s. ʒ viij

M. Sig.: Apply once daily for week; then every third day for tw weeks.

The Matthewson Laboratory, Marshall, Texas, will furnish additiona information on this valuable product.

I make the broad statement that co cain shall never be used as a method o treatment in eye diseases..—McCaw i *New York Medical Journal.*

Excerpt From the London Daily Chronicle.—The general results of th recent discussion in this paper on th relative value and safety of various an tiseptics derive confirmation from a monograph which we have receive from the Pasteur Institute of Paris. We described the volatile or essential oils of plants as the safest—and the most pleasant, might have been added—o antiseptics for direct human use; that of eucalyptus holding a very high place. A couple of professional members of the Association of Analytical Chemists of the Pasteur Institute have been studying Listerine, which is named after the great English surgeon. Listerine is a mixture of the essential oils of thyme, eucalyptus, baptisia, wintergreen and mint. It has relatively non-toxic properties peculiar to these oils,

WITHOUT RESPIRAZONE

(Tilden's)

STHMA remains the BETE NOIR of Physicians.

WITH RESPIRAZONE

(Tilden's)

ASTHMA has lost its terror.

It gives prompt relief in Asthma, Hay-ver and all spasmodic respiratory dis-ses.

NARKOGEN.

(Tilden's)

HYPNOTIC, ANODYNE, ANTI-SPASMODIC.

A Step in Direction of Definite Thera-peutics.

Each fluid dram contains:

Hydrate Chloral.....grs. x
Potass Bromide.....grs. x
Hyoscin Hy robromate.....grs $\frac{1}{100}$
Narkine (Tilden's).....grs. ss

"A new Valuation of all Values."

Prepared expressly for Physicians' Prescriptions.

THE TILDEN COMPANY,

Manufacturing Pharmacists.

ew Lebanon, N. Y. **St. Louis, Mo.**

lt the Parisian savants have brought lt the important fact that the mixture oils is much more potent than any le of them singly. It attacks more an one of them singly. It attacks ore than one joint in the bacterial ar-our. Carbolic acid—used so much ainly because it is the original antisep-employed by Lister—is 146 times as xic as Listerine.

Physician's Wife.—Aren't you going take your instrument case? Physi-an—No. The patient is a plumber. m going to send back for the instru-ents and charge him for the time.

Sanmetto in Urinary Irritability in e Aged of Both Sexes, in Enuresis in hildren, and in Sexual Atony, Espe-ally the Sexual Aversion Among Wo-en with Mammary Non-Development. -I have used Sanmetto extensively in y practice, and am now prescribing it

STRAWBERRY PLANTS.

The Largest Stock in the World. Nearly 100 Varieties.

All the choice, luscious kinds for the Garden and Fancy Market. Also Shipping Varieties. Also **Fruit Trees of all kinds to Growers at Wholesale Rates. We will save you half in planting an orchard.** Dewberries, Asparagus, Rhubarb, Grape Vines, etc., etc.

Our 120 page Manual, free to buyers, enables everybody to grow them with success and profit.

All plants packed to carry across the continent fresh as when dug. Illustrated catalogue free. Specify if you want catalogue of Shipping Varieties or fancy Garden kinds.

CONTINENTAL PLANT CO.,
Kittrell, N. C.

two or three times daily, and have to meet with the first disappointment in well chosen cases. I use it with feelings of assurance in urinary irritability in the aged of both sexes; in enuresis in children, and in sexual atony, especially the sexual aversions among women with mammary non-development or mammary atrophy, because of nursing. Its action seems to be very remarkable upon the glands of the genito-urinary tract. Many cases of immature organs rapidly develop under its use, and the atonic condition of abused organs relieved. I like Sanmetto and shall continue its use when indicated.

JOHN D. NORTH, M. D.
Jackson, Mich.

Action of Bile Upon the Heart and the Cause of the Retarded Pulse Rate in Jaundice.—Kurt Brandenburg, by a series of experiments upon animals, shows that a small amount of bile introduced into the circulation irritates the nerves of sensation ot the heart, and in this manner by reflex action through the vagus produces a retardation of the heart's action. If large quantities of bile are introduced it acts directly upon the cardiac muscle, showing the heart beat, and if the quantity of bile be large enough, completely paralyzing its action. The biliary acids are the constituents of the bile which produces the effect.

I have been using Saline Laxative for some time and find this preparation to be superior to any part that I have ever tried, and I resort to it now altogether and would not think of getting along without it.

DR. W. T. SCHWABLAND.
Anthon, Ia.

MEDICAL NEWS AND ITEMS.

Yellow fever is epidemic on the Gulf coast of Mexico.

Dr. H. A. Varner, of Teachey's, has moved to Salisbury, N. C.

Typhus is reported ravaging in the interior of China. Ten thousand persons have died.

Marseilles admits the presence in that city of the plague, five deaths having occurred.

The Hospital College of Medicine, of Louisville, Ky., sustained a heavy loss when Dr. Joseph M. Mathews resigned from the faculty to devote his whole time to private practice.

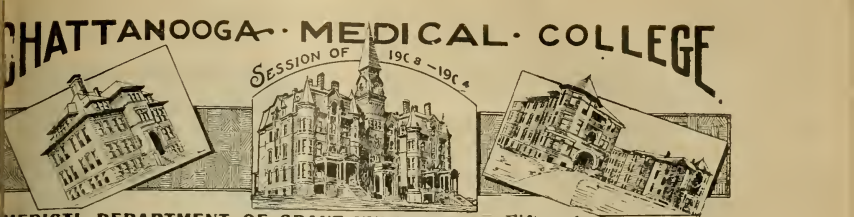
Toy pistols and dynamite explosives have killed or maimed hundreds, and it is with pleasure we learn that the Buffalo Academy of Medicine has started a crusade against them.

The next meeting of the Seaboard Medical Association will be held in Norfolk, December 15, 16 and 17. Dr. B. R. Kennon, of Norfolk, is chairman of the committe of arrangements.

At the recent medical licensing examination in Pennsylvania, of 392 applicants, one was expelled for drinking, two withdrew on account of illness, and fifty-one failed to pass the examination.

Georgia has at last a State Board of Health. Its first meeting was held on September 10th. Dr. Willis F. Westmoreland, of Atlanta, is president, and Dr. H. F. Harris, of Atlanta, is secretary.

Dr. A. M. Whisnant, of Charlotte, was married on Wednesday, November 4th, to Miss Hope Spencer, daughter of Mr. J. S. Spencer, of Charlotte. The



MEDICAL DEPARTMENT OF GRANT UNIVERSITY. Fifteenth Annual Session gins in October and continues until April. New buildings. Delightful climate. Large tronage. Every facility. A full teaching corps. Laboratories with latest equipment. odern methods of instruction. Excellent hospital Minimum living expenses. City one the most beautiful in America, both by nature and art. National Military Park. National Cemetery, and miles of splendid Government Boulevards. Scenic surroundings excelled on this continent. Requirements those of Southern Medical College Association.

E. A. COBLEIGH, M. D., Dean, Chattanooga, Tennessee.

University of Maryland

SCHOOL OF MEDICINE.

The Ninety-Seventh Regular Session will begin October 1st, 1903, and con- ue until May 15th, 1904. Four Years Graded Course. New Laboratory ilding. Excellent Laboratory Equipment. Clinical Advantages Unsurpassed. r catalogue and other information, address

R. DORSEY COALE, Ph. D., Dean,

niversity of Maryland, *Baltimore, Maryland.*

University of Virginia,

Medical Department.

CHARLOTTESVILLE, VA.

The course of instruction in this Department extends over four full ses- ns of nine months each, and embraces a full series of didactic lectures th ample practical work in Anatomy and Operative Surgery in the Bio- ical and Pathological Laboratories.

A Modern Teaching Hospital.

Session begins 15th September.

For catalogue, address . . . . . **J. M. PAGE, Chairman.**

OLLEGE OF PHYSICIANS AND SURGEONS OF BALTIMORE, MD.

Thirty-Second Annual Session will begin October 1st, 1903. New building, modern uipment, unsurpassed laboratories, large and independent Lying-in Asylum for practi- obstetrics, and many hospitals for clinical work, present to the medical student every vantage. For catalogue and other information, apply to

THOMAS OPIE, M. D., Dean, Cor. Calvert and Saratoga Sts., Baltimore, Md.

When writing advertisers please mention this Journal.

JOURNAL extends congratulations and best wishes.

Rheumatism Specialist Fined.—"Dr." D. J. Zilkon, Cleveland, a so-called specialist on rheumatic diseases, pleaded guilty to practicing without a license and was fined $25 and costs, at Lorain, September 25.

"The coroner of Philadelphia reports that fifty per cent. of the deaths among children coming under his notice were due to aural sepsis."—Dr. J. H. McCassey, in *Pediatrics*. (Surely a mistake. Five per cent. must be intended.—Ed.)

Smallpox Stamped Out.—Smallpox may be regarded as stamped out of Massachusetts. Very few cases exist within the borders of the State; these few are nearly all imported and no new cases at all are reported for the week ended October 10.

No case of smallpox occurred in Maryland in September, and but one in August. The State is believed to be entirely free from the disease. One case arriving by rail from Uniontown, Pa., was apprehended immediately and sent to Quarantine Hospital.

One Result of the Recent Storm.—The storeroom in the basement of Bellevue Hospital was flooded to the depth of about three feet, as a result of the recent heavy rains, and a damage done to stores estimated at over $5,000. The hospital grounds looked like a lake.

Jury Disagreed.—In the suit for malpractice brought by an alcoholic patient against Drs. G. Lenox Curtis and John H. Storer, in which he alleged that he had been seriously injured while undergoing electric-light treatment and had been damaged to the extent of $10,000, the jury disagreed.

University of Maryland.—The building now occupied by the dental department of the University of Maryland is to be replaced by a four-story buildi ninety feet by one hundred. The tw lower floors will be used by the dent department, and the two upper floo by the medical department for labor tories.

Suicide on the Increase.—In 19 there were 772 suicides in Greater Ne York. Ten years ago the number w about 50 per cent. less Of these su cides 196 were women, 73 of whor were native-born. In Manhattan an the Bronx the suicide rate per 100,00 has increased from 14 to 22 in the la ten years.

Dr. Julian J. Chisholm, of Baltimor died on November 1st in Petersburg Va., at which place he has lived sinc 1899. Dr. Chisholm was founder o the Presbyterian Eye, Ear and Throa Hospital in Baltimore. He was als dean of the Maryland Medical Colleg and one of the foremost eye surgeon of his day.

A Railway Hospital on Wheels.—A hospital car is the latest addition to th rolling stock of the San Pedro, Lo Angeles, and Salt Lake Railroad. Th car has several staterooms for conva lescents, a surgical room, and a larg section that will accommodate a doze

CUTS MADE BY THE MEMPHIS ENGRAVING CO. CUTS FOR ALL PURPOSES. MEMPHIS, TENN.

Engraved Invitations and Cards.

DR. C. A. MISENHEIME

CHARLOTTE, N. C.

Special Attention Given to Surge and Diseases of Women.

ts. Complete outfits of instruments d drugs have been provided.

The October issue of the *International Journal of Surgery* is an "Electro and dio-Therapeutic" number and contains many very interesting papers of ue, not only to those engaged in that e of work, but to the general practiner as well, as the papers indicate class of cases that can hope for efit from that line of treatment.

Gruesome discoveries have lately n made at Quincy, Ill., in the house merly used as a private sanatorium Dr. Carl L. Weber. The skeletons five women have been found, and supposed to be the remains of pants of Dr. Weber. Dr. Weber will be prosecuted, as he is at present in lusion, a mental and physical wreck.

Philadelphia Hospital.—The nurses' rmary of this institution is being roughly rebuilt and renovated. The m formerly used for the orthopaedic rd is being transformed into an inary for the use of the large staff resident physicians. Some of the vacies among the head nurses have n filled by graduates from other inutions.

The Value of the Finger Joint.—e hundred dollars is the value placed a man's finger joint by a jury at wark, N. J. Henry Klein, a hatter, in wark, was the plaintiff. While at k on September 21, 1902, Klein's hand was caught in a forming mahe, and one finger was so badly shed that it was necessary to amputit at the first joint.

thaca is still entertaining typhoid. local authorities have failed to fill places vacated by the resignation of Board of Health, and Dr. G. A. So- the special expert of the State rd of Health, has quit the benighted

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3 00 to 5.00 P. M.
Sundays 9 00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:

8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

village in disgust. Some twenty or so Baltimore boys went to Ithaca in September, but not upon any business connected with the typhoid fever.

Toy Pistol Dealers Indicted in Philadephia.—Indictments against three retail dealers were recently returned by the grand jury on the charge of selling toy pistols to minors. Indictments were also returned against two wholesale dealers charging them with supplying the pistols to retailers. The action was prompted by the many cases of tetanus recently caused by pistol injuries.

The Germ of Inebriety.—It is said that E. M. Patterson, a State food inspector of Illinois, believes that the milk of distillery-fed cows infect the people of Chicago with the germ of alcoholic inebriety, and he has stopped the sale of the milk. So Chicago has been saved from an epidemic of drunkenness. A small outbreak would give confirmation to Mr. Patterson's view. It could easily be arranged.

Dr. Frank W. Lynch has resigned as resident obstetrician at the Johns Hopkins Hospital and associate in obstetrics at the Medical School to accept a position in the University of Chicago.

Fresh Outbreak of Smallpox—There has been another increase in the number of smallpox cases in Philadelphia, five cases occurring in one house. The whole force of the bureau of health was put to work, and the affected premises were rigidly disinfected and fumigated.

For the Encouragement of the Bloodless Operation on the Hip.—It is rumored that Mr. Armour, of Chicago, is so pleased with the result of the recent operation on the congenitally dislocated hip of his little daughter, that he has decided to endow a clinic in many of the large hospitals in the United States and Canada. A specially salaried surgeon will be attached to each clinic, a having had facilities for the study the operation, also at Mr. Armour's pense.

In Texas, a farmer, of Collins cou brought suit against the Houston Texas Central Railroad, for so in ing his horses with a train that t died, says *American Medicine.* testimony was considered, and it se ed that the plaintiff would win his c tention, but when he went on the st in his own behalf and was asked w treatment he had given them, he swered that he had given them Christian Science treatment. The j at once returned a verdict in favor the railroad company.

Something for Leisure Hours "Stories of a Country Doctor" a "Recollections of a Rebel Surgeon" two books that doctors should add their libraries. "All work and no pla interferes with one's usefulness by m ing him a drudge. Relaxation d good to the doctor and his patie These two books are brimful of wit a human nature and are just the thi the doctor needs to enable him to forg himself. The two books, bound cloth are offered at the special price $1.00 by the Clinic Publishing Co., C cago.

"Drug Habit," by W. E. Nichols the *Wisconsin Medical Recorder,* co tains much interesting data. The sal of "patent" medicines amount to ov $65,000,000 annually and are steadi increasing. Most of these nostrun contain alcohol in from 17 to 44 p cent. In 1902 three times as much c caine was imported as in 1898, and is hardly possibly to assume that th enormously increased consumption w due entirely to an increase in the legit mate use of the drug. Dr. Nicho suggests as a cure of the opium, cocaine

THE PRESBYTERIAN HOSPITAL

Will Receive all Classes

Of Medical and Surgical Cases,

(EXCEPT CONTAGIOUS.)

Full Corps of PHYSICIANS

and SURGEONS in Attendance.

Address,

PRESBYTERIAN HOSPITAL,

Charlotte, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain CACTINA, the active proximate principle of CEREUS GRANDIFLORA.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for
INDIGESTION

A palatable preparation of PANAX SCHINSENG in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

JOHN R. IRWIN, M. D.,

CHARLOTTE, N. C.

Special Attention Given Surgery and Gynecology.

Doctor, Do You Know That

is the most satisfactory therapeutic agent for local treatment of

SKIN DISEASES?

It gives quick results; satisfactory results; permanent results; clean and easily applied; in sufficient strength always allays itching.

FORMULA:

The active principles of Chaparro Amargoso in Chemical Combination with Phenol, Camphor and Salicylic Acid.

ADDRESS:

The Matthewson Laboratory,

Marshall, Texas.

Physicians are requested to have their druggists order half dozen Chaparrin for prescription use. Prices include postage:

1 2-Oz. Bottle, -$1.00
1 4-Oz. Bottle, - 1.75
6 2-Oz. Bottles, - 4.75

and alcohol habits the careful use of hyoscine hydrobromate.

Prophylaxis of Venereal Diseases Among Students.—The Prussian minister of public instruction has notified the faculties of the universities that steps must be taken to warn the students against the dangers of venereal diseases to health and morals. He suggests as the most appropriate means short public lectures for the students in all departments of the universities, the lectures to be from the faculties of medicine, philosophy and theology. These faculties are bidden to organize such courses at their earliest convenience. Our medical exchanges remark that the co-operation of the theologians might be dispensed with as the students know well enough the ethical side of the matter, but choose to disregard it. The extent of the peril to health, however, is not known to most of them, and in this they need enlightenment.

Mirror or Window at Will.—A New York man has invented a mirror that can be made translucent at will, so that when placed in a show window it at first reflects the faces of people looking in, but suddenly turns transparent whereupon the spectators see the contents of the window in place of their own reflections. This is effected by means of a thin film on the back of the glass, which, when the background is dark, reflects the light from in front like a mirror, but when the background is illuminated, becomes as invisible as a pane of clear glass.

Queen Anne was much displeased with Radcliffe and dismissed him from court for telling her she had the vapors; and you, my, dear doctor, must be careful who you tell has hysteria. She would greatly prefer to have brain fever.

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these Preparations.

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

R Each fluidounce contains:

Hypophosphites Soda	2 gr.
" Lime	1½ gr.
" Iron	1½ gr.
" Quinine	¾ gr.
" Manganese ..	1½ gr.
" Strychnine ..	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

B

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate Sodium	12 grains
" Potassium	4 "
" Calcium	4 "
" Iron	2 "
FREE Monohydrated Phosphoric Acid	16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles etc.

DOSE.—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Malassimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence of a sedentary life, coupled with nervous and mental strain.

Lime Juice Pepsin is one of the best Digestive Agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating Children, one half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

D

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromaticmenstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50
N. B.—We also make **25 per cent. strength.**
Price per Pint, $2 00

WE NOW MAKE FLEXNER'S

Aloform, in Powder, per ounce	$1 25
Aloform, 5 grain Tablets, per 100	1 25
Aloform Elixir, pints	2 00
Solution Albuminate of Iron, Syrup Albuminate of Iron Comp., pints	1 00
Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

Please specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

Founded 1842. Incorporated 1880. Pamphlets gratis to practitioners by mail upon request.

When writing advertisers please mention this Journal.

CATARACTS!

USE **Succuss Cineraria Maritima.** (BARNES'.)

Successfully used for removal of CAPSULAR and LENTICULAR CATARACTS, CORNEAL OPACITIES.

Does not cause Inflammation.

Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy:

"Mrs C—, aged 73. The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Succuss Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

Dr Osmon Royal, under date of June 4th 1903, writes:

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Succuss Cineraria (Barnes)."

Dr. E. V Cobb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Succuss Cineraria Maritima (Barnes).

MADE FROM THE FRESH GREEN PLANT ONLY.

$1.00 per vial 2 drachm. $3.00 per oz. by mail, post paid

Send for literature. Made exclusively by

THE BOTANIC DRUG COMPANY,

BRIDGEPORT, ALA., U. S. A.

Jets of Water for Lighting Protectors.—When the members of the British Institution of Electrical Engineers paid a visit of inspection to northern Italy lately, they were interested in a device used to protect the overhead transmission lines of an electric traction system from lightning discharges. The device consists of jets of water, which form a permanent "earth" at the Monbegno generating station on the Valtellina line. The electric resistance of the jets was said to be sufficient to prevent a serious loss of current, while not too great to enable them to serve for protection against lightning.

"I have sailed the seas for half a century, gentlemen," said Captain Cochrane to a group upon the deck of his ship. "When any of you begin to feel a bit qualmish, come to me. I will give you the best remedy I know of." "What is it?" asked two or three, hesitatingly. "A mint julep." "Why," asked the others, restlessly. "Because it tastes just as good coming up as it does going down." The party, without excusing themselves struck for the steward's room.

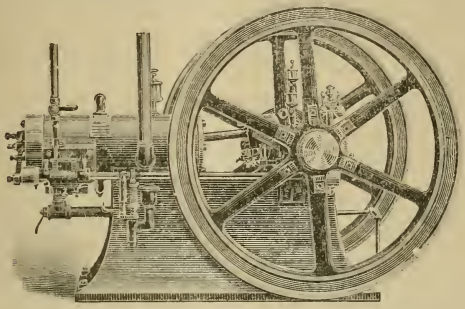
Adrenaline in Uterin Hemorrhage.—Fifteen-drop doses of adrenalin chloride solution, by the mouth, has, in many cases, checked hemorrhage from the uterus, when ergot and hamamelis had failed.

Doctor—"Your temperature is up to 103 degrees."

Auctioneer (drowsily)—"Hundred an' three! Hundred an' three! Going going at hundred an' three. Who'll make it a hundred an' four?"

GAS AND GASOLENE ENGINES

Available for all Power Purposes, and built in sizes from one to 100 H. P.



THE FAIRBANKS COMPANY.

"FAIRBANKS" STANDARD SCALES.

19 and 21 Light Street, - - - - - BALTIMORE, MD.

Write for catalogue and particulars.

Crystalized Wisdom: *The Knowledge of the Ancients.*—"The plainest moral to be deduced is that a great deal of the ancient wisdom is really wisdom. It has been an egotistic habit to republish the nonsense and quackeries and superstitions of medical history as conceited proofs of how superior we are to our forbears. This was as foolish as it was untrue. We are not so mightily superior as we think."—George M. Gould, Medical Discoveries by the Non-Medical, *Journal of the American Medical Association.*

Doctor, you do not perform your full duty to your profession unless you contribute at least one article to the sum total of medical science. With so many thousands of educated and trained observers, the improvement should be rapid and sure.—*Medical Council.*

NOITOL

Is not a Salve, Ointment, Soap, Tar, or other disagreeable preparation, but a limpid, inoffensive, odorless solution, as its name *spelled backward* indicates.

SAMPLES GRATIS.

REDDING, CAL.

GENTLEMEN:—I would not take ten times the cost of NOITOL and be without it. It is, without exception, the finest application I have ever used in Eczema.

F. P. MITCHELL, M D.

The Most Successful Remedy for

ECZEMA

AS ALSO

For Skin Diseases Generally.

Wheeler Chemical Works,

2 State Street, Chicago.

Jefferson Medical Colleg

OF PHILADELPHIA.

New College Building and New Laboratories.

The Seventy-Ninth Annual Session will begin September 24th, 1903, and continu eight months. For four annual sessions the curriculum pr vides without extra fee: Practical manual training in ten different laboratories recently fitted up at heavy cos 2. Recitations by the faculty and others. 3 Didactic lectures and demonstrations in th commodious new buildings. 4. Clinics and bedside ward work in small groups at the Co lege Hospital, beside the clinics given by the staff of the College at the Pennsylvani Philadelphia, German, St. Joseph's and Municipal Hospitals. 5. Lying-in cases at th College Maternity.

A New Fire-Proof Hospital, with unrivalled facilities for clinical teaching, is no building at a cost of $700,000.

For circular and information, address **J. W. HOLLAND, Dean.**

University College of Medicine,

RICHMOND, VIRGINIA.

MEDICINE — DENTISTRY — PHARMACY.

Unity — — — — *therefore,* strong courses.
Concentration — *thereby,* strong teaching.
Method — — — *therefrom,* strong students.

CATALOGUE — 100 PAGES — ON APPLICATION.

Eight Great Secrets of Success.—A man with a mania for answering advertisements has had some interesting experiences. He learned that by sending $1 to a Yankee he could get a cure for drunkenness. And he did. It was to "take the pledge and keep it."

Then he sent fifty cents to find out how to raise turnips successfully. He found out: "Just take hold of the tops and lift."

Being young, he wished to marry, and sent thirty one-cent stamps to a Chicago firm for information as to how to make an impression. When the answer came, it read: "Sit down on a pan of dough."

Next advertisement he answered read, "How to double your money in six months." He was told to convert his money into bills, fold them, and thus double his money.

Next he sent for twelve useful household articles and got a package of needles.

He was slow to learn, so he sent $1 to learn "how to get rich." "Work hard and never spend a cent." That stopped him.

But his brother wrote to find out how to write without pen or ink. He was told to use a lead-pencil.

He paid $1 to learn how to live without work, and was told on a postal card: "Fish for easy marks, as we do."

The president of the Washington State Board of Medical Examiners, in a letter to *Northwest Medicine,* cites some answers to questions in the examination in Physiology. They were all from graduates of Eastern schools, and some of them are "choice:"

"Section of the pneumogastric would produce paralysis of the brain.'

"Fibrin is a mass of fibrous elements floating freely in the blood."

"Vim passes out through the navel."

The orthography is highly entertaining: "Esofagus," "gasss," oxigen," "paralicic," etc.—*Cal. State Journ. of Med.*

Vapo-Cresolene

Cures while they sleep.

Whooping Cough, Croup, Asthma, Coughs, Colds, Catarrh, Bronchitis, Grippe.

An antiseptic, antispasmodic and prophylactic, to be vaporized for the treatment of **Whooping Cough, Croup, Bronchitis, Asthma, Diphtheria** and kindred diseases of the throat and air passages.

It takes time to prove the value of a remedy: CRESOLENE has over twenty years behind it and the assurance of a vigorous and growing demand, besides the personal acknowledgment of many physicians, that it is the best remedy, particularly for **Whooping Cough** and **Croup** ever introduced. The application of CRESOLENE is simplicity itself. The Vaporizer acts from five to six hours without attention. The patient breathes the medicated air of the room. The treatment being by inhalation does away with the necessity of waking the patient, which, in itself, is of sufficient importance to warrant giving it a trial. **CRESOLENE may be used in connection with any other treatment,** and is used with success in the treatment of **Diphtheria, Scarlet Fever and Measles.** When used for the two former diseases and Membraneous Croup a tent should be built around the bed. CRESOLENE is a product of coal tar of much greater antiseptic power than carbolic acid. Send for descriptive booklet, containing physicians' testimonials and price list.

NOTICE.—Physicians will be allowed a liberal discount, express paid on first order and money back if not satisfied.

THE VAPO-CRESOLENE CO., 180 Fulton St., New York.

Peculiarities of Long Island.—The ass in geography in one of the Brooklyn schools was asked by the teacher: "What are some of the natural peculiarities of Long Island?" The pupils tried think, and after a while a boy raised hand.

"I know," said he.

"Well, what are they?" asked the acher.

"Why," said the boy with a triumant look, "on the south side you see e sea and on the north side you hear e sound."—*Chicago Chronicle.*

"Anybody but a physician can prace medicine; anybody but a dentist can actice dentisty; anybody but a qualid druggist can sell drugs without ying any attention to the law. . . he manufacturer of and dealer in set and proprietory medicines . . . y know nothing about drugs or disease, about medicines or their effects. He makes up compounds of whose ingredients he does not know the name or the nature and he may recommend and prescribe these preparations for any every ill that flesh is heir to—AND HE DOES IT."—*Dr. A. R. McCarthy in Penn. Med. Journal.*

Push Things.—At one time during the Civil War General Grant wired to another general:

"How are you getting along?"

The reply was: "We are getting along very well, but it would be better if things could be pushed."

Grant wired back: "Push things, then."

Many a medical advertising campaign has failed because of the failure to "push things" at the right time.

The timid, hesitating man never becomes a successful advertiser.

The Hopkins Compressed Air Heaters

Electric Gas Alcohol

The Perfect Instrument for treatment of the ear with superheated air. Practically indestructible. Patented in all features. All kinds of special electric heaters for medical work. Write for booklet.

THE TERRY HEATER CO.,
Cleveland, Ohio.

Out of Date.—"What's that?" asked the rich man, who was buying a few paintings. "That's Pegasus," replied the dealer. "Pegasus, you know, was a winged horse." "Send it back to the artist and tell him to put the wings on an automobile, and I'll buy it," said the rich man.—*Chicago Evening Post.*

Many failures in treatment occur in cases in which the physician has made a correct diagnosis but places too little stress in his directions to the patient upon whom the importance of changing radically the faulty modes of living which produced the disease, and too much upon our remedies, especially drugs.—*Boardman Reed, D. D.*

Engaged.—Visitor: "Is Miss Rankin in?"

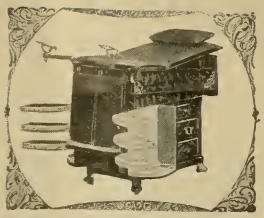
Servant: "Yes, sir."

Visitor: "Is she engaged?"

Servant: "Yes, sir; but the gentleman ain't here this evening, sir. Come in."—*Tit-Bits.*

Stranger. — Is Dr. Quackerly in Servant.—No, sir; he went up the river this morning to shoot ducks. Stranger —Well, I'm sorry he isn't at home. could put him onto bigger game."

Internal Neuralgic Pains.—Neuralgic pains affecting the internal organ will often yield to strychnine arseniate one one-hundred-and-thirty-fourth grain, repeated as indicated.



A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your tients. Therefore, in the selection of your equipment you should exercise great care. ıe testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

re the best and are adapted to all lines of regular and special practice. They are superior workmanship and design, and include more conveniences than any other line on the arket. (Catalogue " A " fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

Sanatorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

eautifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

IAPLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

---

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &c.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents.

Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

Iodoform Vapor

TRADE
(IODO-VAPO)
MARK

It is conceded that Iodoform is **unrivaled** as an antiseptic, the **one** obj tion to its use being its odor. Chemists in eliminating the characteris odor of Iodoform have always eliminated Iodoform. We have, in Iod Vapo, Iodoform mixed with other valuable and bland antiseptics in su proportions that the iodoform odor is completely disguised. This compou has proven itself to be almost a specific in treatment of **Catarrh** of the A **Passages.** It is applied by means of any good nebulizer. To prove th truth of our statement we will send to any licensed physician in the Unit States one full size bottle.

Sample and Formula sent on request.

HARGRAVE CHEMICAL CO.,
WILSON, N. C.

Presbyterian College for Women....

Charlotte, N. C.

Magnificent New Buildings. Every Essential of Health and Comfort. Good Fare. Experienced Teachers. Standard Advanced. Music and Art our Specialties. Charges lower than any other School of same grade in the South.

REV. J. R. BRIDGES, D. D., President.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

A Natural Mineral Water Remedy in Concentrated Form.

Echols' Piedmont Concentrated Iron and Alum Water

Is now being prescribed by physicians all over this country, and unless we knew it would stand the most severe test, your attention would not be called to it in this Journal.

We have seen our remedy cure so many Chronic Diseases after the methods usually employed had failed, that we now guarantee satisfactory results after a fair trial.

We can send you testimonials that mean something from both prominent physicians and people you know.

The analysis of the Concentrated Water is nearly identical with that of a healthy human system, and we think this alone should be sufficient to commend it to any physician.

Such diseases as Indigestion, Rheumatism, Catarrh, Female Complaints, Kidney and Bladder Troubles, Nervousness, Torpid Liver, Stomach and Bowel Disorders, Scrofula and Blood Troubles are successfully treated with Concentrated Water, and we will send an 18-oz. bottle of same (equal to 25 gallons of Natural Water) free of cost to any physician wishing to test it.

For sale by druggists. 8-oz. bottles 50 cents. 18-oz. bottles $1.00.

J. M. ECHOLS COMPANY, - - LYNCHBURG, VIRGINIA.

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED 1881—OPENED IN 1882.

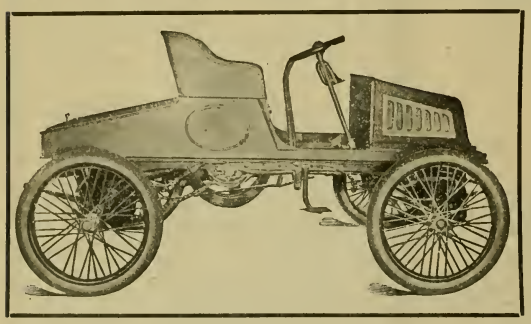
The New York Polyclinic is a school for teaching graduates t most recent methods of diagnosis and treatment in every departme of medicine. The clinical material is abundant, and the hospital war adjoin the lecture rooms. Since the fire in 1896, a new building h been erected and thoroughly equipped, and the Institution is no prepared to offer better facilities than ever. Students may enter any time.

FACULTY.

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James Tuttle, M. D.; John A. Wyeth, M. D.
MEDICINE—Isaac Adler, M. D.; Morris Manges, M. D.; W. H. Katzenbach, M. D.; J. D. Nisbet, M. D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt. H. Wylie, M. D.; Brooks H. Wells, M. D.; W. Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—August Seibert, M. D.
DERMATOLOGY—Edward B. Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O. Born, M. D.; W. E. Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M. D.; Robert Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederich Whiting, M. D.
EUROLOGY—B. Sachs, M. D.
OBSTETRICE—Edward A. Ayers, M. D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New Yor

THE "ZENTMOBILE'



Where quality is desired, where comfort, durability and genuine pleasure is demande in an automobile, this machine should be investigated before ordering.

We are all after results in an automobile, as well as everything else, and the best results are only obtained by years of persistent experimenting. We have passed through this stage. Don't buy an experiment. Get something that will require the least attention. It is a "ZENTMOBILE." - - - Get price and full particulars.

SINGLE CENTRE BUGGY COMPANY, Evansville, Indiana.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

Keep Posted on the

PHARMACEUTICAL BAYER PRODUCTS

ARISTOCHIN

Quinine Divested of its Disadvantages.

CITARIN

The Anti-Lithemic.

HEDONAL

The Promoter of Natural Sleep.

THEOCIN and AGURIN

The Most Powerful Diuretics.

PROTARGOL

The Best Substitute for Silver Nitrate.

HELMITOL

The Urinary Antiseptic, Analgesic.

SAMPLES AND LITERATURE SUPPLIED BY

FARBENFABRIKEN of ELBERFELD CO.

P. O. BOX 2160. NEW YORK. 40 STONE ST.

MELLIN'S INFANTS' FOOD

Mellin's Food babies have pink cheeks, bright eyes, sound teeth, strong limbs and firm flesh.

Our book, "The Home Modification of Cow's Milk," sent to physicians free upon request.

Mellin's Food Co. : : : Boston, Mass.

Physicians

are prescribing

Glyco - Heroin - (Smith)

with

Unexampled and perfect satisfaction —in—

In therapeutic qualities and physical characteristics, GLYCO-HEROIN-(SMITH) presents the highest progress of Medicine in the treatment of these diseases.

Coughs
Phthisis
Bronchitis
Pertussis
Laryngitis
Pneumonia
Asthma

—— *NOTE* ——

GLYCO-HEROIN-(SMITH) is supplied to the druggist in sixteen ounce dispensing bottle only. The quantity ordinarily prescribed by the physician is two, three or four ounces

—— *DOSE* ——

The adult dose of GLYCO-HEROIN-(SMITH) is one teaspoonful, repeated every two hours or at longer intervals as the case may require.
Children of ten or more years, from a quarter to a half teaspoonful.
Children of three years or more, five to ten drops.

Sample and literature free upon application.

MARTIN H. SMITH CO.,
NEW YORK, N. Y.

SOLE BRITISH AGENTS:
THOMAS CHRISTY & CO.,
LONDON, E. C.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

BROADOAKS SANATORIUM.

ISAAC M. TAYLOR, M. D.

Morganton, North Carolina.

A Private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits.

RIO

Women suffering from an Aching Back, Bearing Down Abdominal Pains, or any abnormal condition of the Uterine system, should be given ALETRIS CORDIAL RIO in teaspoonful doses four times a day.

Rio Chemical Co., New York.

St. Luke's Hospital,

1000 West Grace St.,

RICHMOND, VIRGINIA.

Personally Conducted by Dr. Stuart McGuire for the Exclusive Use of His Private Patients.

St. Luke's Nurse's Home,

507 West Grace St.,

RICHMOND, VIRGINIA.

Physicians Can Obtain Graduate Nurses for Private Work by Telephoning or Telegraphing the Superintendent.

When writing advertisers please mention this Journal.

AS The Successful Introduction

of a really meritorious remedy is immediately followed by the unwarranted and most damaging dissatisfaction of Imitations and Substitutions, which flood the market almost beyond the physician's comprehension, it therefore behooves us to kindly and particularly request not only the specification (Gude), but the prescribing ***of ORIGINAL BOTTLES by every physician*** who desires to employ in his treatment

Pepto-Mangan ("Gude")

which is the original and only true organic preparation of iron and manganese, and the source and foundation of all the exceptional and positive therapeutic merit experienced in this product.

Imitations with similar sounding names, but dissimilar in every other respect, **are mischievous enough,** but in nefariousness are yet unequal to substitution and the substitutor, against whom **the physician's only assurance is an *original bottle.***

GUDE'S PEPTO-MANGAN has, since its introduction to the Medical Profession of the World, always proved its superiority over other blood-making compounds, and furthermore will always substantiate all the statements so highly commending its value.

As this certainty in efficacy has won for this preparation the confidence and reliance of the physician, we, to protect you, your patients and ourselves against such conscienceless methods, earnestly ask the prescribing of ***original bottles*** only. This request, though seemingly of little importance, will be significant in view of the astounding knowledge that 75% of the manufacturers are not only offering but selling gallons and kegs of so called "Just as Good" iron mixtures, which have not undergone and dare not undergo either the scrutiny of the physician or examination by the chemist.

While there is only one Pepto-Mangan

which is never **supplied in** any form of package other than our
. . . regular eleven-ounce hexagonal bottle, . . .
you will readily surmise the intent of these imitation preparations which are wholly unknown to the Medical Profession, and agree with us in the importance of the above request.

Any one offering Pepto-Mangan in bulk form, either intentionally or unintentionally practises substitution; hence our solicitation for your co-operation against this harmful, unjustifiable, and inexcusable fraud.

M. J. BREITENBACH COMPANY,
53 WARREN STREET NEW YORK

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

THE THIRST AND NAUSEA OF ANÆSTHESIA

are entirely prevented, and the shock of surgical operation greatly relieved by high rectal injections of

Bovinine

It should be administered with salt solution, heated to 70°F, an hour prior to operation, during same if shock is evident, and after returning patient to bed. The quantity of the injection must be suited to the individual case, varying from 2 ounces to 6 ounces of each. The salt solution renders the absorption of the ***Bovinine*** more rapid, and the heart action is immediately improved; the sustaining effect is continuous for two to three hours. The circulation which has become non-aerated through ether administration is oxygenated by the ***Bovinine,*** and rapidly restored to normal condition. Hence the absence of nausea and emesis. A postal will bring you our scientific treatise on Hæmatherapy, with reports of numerous cases.

The Bovinine Company,

75 West Houston Street, NEW YORK.

When writing advertisers please mention this Journal.

PEACOCK'S BROMIDES

PEACOCK'S BROMIDES
The Purest Form of Bromides.
Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Lithium.
DOSE: One to three teaspoonfuls according to the amount of Bromides required.

CHIONIA
From Chionanthus Virginica.
Re-establishes portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.
DOSE: One to two teaspoonfuls three times a day.

Full size sample to physicians who will pay express charges
PEACOCK CHEMICAL CO., ST. LOUIS

CHIONIA

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—
CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day. **OD CHEM. CO., NEW YORK.**

GLYCOSINE PHOSPHATE

Founded upon the teachings of Professor Dusart, of the University of Paris

IS A NEW AND PERFFCT COMBINATION FOR ALL FORMS OF INDIGESTION AND NERVE-WEAKNESS.

Composed of Phosphates of Lime, Soda, Potash, and Magnesia, combined with Phosphoric Acid, together with certain digestive agents dissolved in Glycerine.

This preparation is a most excellent remedy for all those diseases which are the result of Nerve-Weakness, such as Indigestion in all its various forms (Indigestion of Consumptives not excepted); Nervous Prostration Sick Headache, Insomnia, Mental and Physical Exhaustion; Ill Effects of Coffee, Tobacco and Whiskey; Weakened Energy, or Impaired Vitality Malnutrition; Catarrhal Affections of the Stomach, Intestines, Bladder and Kidneys; Nervousness during the Change of Life, etc.

GLYCOSINE PHOSPHATE COMPANY,

15 E. Fayette St., Baltimore, Md. 101 N. Main St., Salisbury, N. C.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

ANTIPHLOGISTINE

Embraces by far the largest and most important field of curative therapeutics of any preparation known to the medical profession. This is a strong statement, true, but Antiphlogistine

HAS

Demonstrated to the best clinicians the world over, its decided value in relieving inflammation of the superficial and deep structures.

A

Medication which assures results to the practitioner, economizing the patient's energy and finance, cannot fail to hold its permanent and praiseworthy reputation.

In every instance it is of the utmost importance that Antiphlogistine be applied warm and thick and covered with absorbent cotton and a compress.

Synovitis, Bruises and Sprains readily recover under the protecting and aiding influence of Antiphlogistine. In deep-seated inflammations of the thoracic and abdominal viscera, Antiphlogistine has the

REPUTATION

Of rendering effective relief, very often aborting a serious termination by immediate resolution.

For convenience Antiphlogistine is marketed in four sizes only—Small, Medium, Large and Hospital—never in bulk. To insure economy and the best results always order a full package and specify the size required.

The Denver Chemical Mfg. Co.

DENVER LONDON NEW YORK

SHARP & DOHME'S
S&D
S&D
LAPACTIC
PILLS
"I MOVE THE BOWELS"
IN
CHRONIC
CONSTIPATION
IN
ATONIC
DYSPEPSIA
LAPACTIC PILLS
NEVER GRIPE
MADE ONLY BY
SHARP & DOHME
BALTIMORE
CHICAGO - NEW ORLEANS - ST LOUIS
NEW YORK

The Passing Clouds

A Small Volume of Facts and Romance by DR. D. S. MORRILL.

¶ Issued by the Franklyn Publishing Co., of Atlanta, Ga., and mailed by them on receipt of price, $1 00.

The Halcyon Retreat.

A thoroughly equipped Private Sanatorium for the Treatment of Medical and Surgical Cases. Separate Apartment for Drug Habitues.

STAFF.

Drs. J. B. S. Holmes and J. G. Earnest, Diseases of Women.
Dr. W. F. Goldsmith, General Surgery.
Dr. C. C. Stockard, General Medicine and Drug Habits.
Dr. S. G. C. Pinckney, Nervous Diseases.
Dr. J. M. Crawford, Eye, Ear, Nose and Throat.
Dr. Michael Hoke, Orthopoedic Surgery.
Dr. E. C. Davis, General Surgery.
Dr. W. Munroe Smith, General Surgery.
Dr. M. A. Purse, Children's Diseases.
Dr. W. L. Champion, Genito-Urinary Diseases.

For terms, etc., address

Dr. C. C. STOCKARD, Res. Phys.,

17 W. Cain Street, Atlanta, Ga.

Table of Contents.

PAGE

EDITORIAL:

Suicide in United States 615
Treatment of Functional Heart Trouble 617
Gonorrhœa in Women 619

ORIGINAL COMMUNICATIONS:

A Clinical Report: R. L. Gibbon, M. D 621
Morobinism, Alcoholism, Etc.: S. M. Crowell, M. D 625
Contagious Acne: Woodbridge Hall Birchmore, M. D 628
The Treatment of Corneal Ulcers: W. H. Wakefield, M. D 633

ABSTRACTS 635
BOOK REVIEWS 642
NEW BOOKS 645
SELECTIONS FROM OUR EXCHANGES 646
NEWER MATERIA MEDICA 650
THERAPEUTIC HINTS 652
MEDICAL NEWS AND ITEMS 662

THE GOODNESS ISN'T THE GREAS

There are just two things about **Cod Liver Oil**—goodness a grease. It used to be thought that you couldn't get the goodness wit out the grease. That's wrong. The goodness isn't the grease. It is more necessary to swallow the nauseous grease of **Cod Liver Oil** to g the valuable principles, than it is to eat the shell of an egg to get the meat.

Right there you have the whole secret of the incalculable value of

HAGEE'S CORDIAL OF COD LIVER OIL COMP

In separating the grease from the valuable properties, nothing is lost in the process. Yo get all that **Cod Liver Oil** is famed for, joined with the hypophosphites of lime and so in a pleasant cordial, without a trace of the dreaded taste. Instead of being greasy, it delightful to take. Instead of a fishy smell, it has an appetizing odor. **Hagee's Cordial** is not a patent medicine. There's nothing mysterious about it. We have simply taken a disagreeable but good remedy, and made it better by making it palatable.

FORMULA ON EVERY BOTTLE

Prescribe

CORD. OL. MORRHUAE COMP. (HAGEE)

AND JUDGE OF THE MERITS BY RESULTS

PUT UP IN 16 OZ BOTTLES ONLY.

Katharmon Chemical Co. St. Louis. Mo.

Index to Advertisers.

	PAGE
Fairchild Bros. & Foster.....Cover	1
Parke, Davis & Co. ..... "	1
Lambert Pharmacal Co..... "	2
Mr. Fellows..... "	3
Manhattan Eye Salve Co..... "	4
E Fougera Co ..... "	4
Bayer Pharmaceutical Products.....	1
Mellins Food Co.	1
Martin H. Smith Co	2
Broadoaks Sanatorium.....	3
R o Chemical Co.	3
St. Luke's Hospital	3
M. J. Breitenbach Co.....	4
The Bovinine Co.....	5
Peacock Chemical Co.....	6
Od Chemical Co.....	6
Glycosine Ph sphate Co.....	6
Denver Chemical Mfg. Co.....	7
Sharp & Dohme.....	8
Franklyn Publishing Co.	9
The Halcyon Retreat.....	9
Katharmon Chemical Co.....	10
Mariani & Co.	11
The Antikamnia Chemical Co.	11
Oakland Chemical Co.	12
Battle & Co.	12
Kress & Owen Co.	13
The Purdue Frederick Co.....	14
Dr. Crowell's Private Sanitarium....	14
Wm. R. Warner & Co.	651
Charles N. Crittenton Co.....	653
H. K. Mulford Co.....	655
American Chemical Co.....	656
Leukretol Chemical Co.	657
The Abbott Alkaloidal Co.....	658
A. M Ake	660
Invalids Table Co.....	660
The Keeley Institute.....	660
Dad Chemical Co.....	660
The Tilden Co.....	661
Continental Plant Co	661
Dios Chemical Co.....	663
Memphis Engraving Co..	664
The Presbyterian Hospital.....	667
Sultan Drug Co.	667
Robinson-Pettet Co.	669
The Botanic Drug Co.....	670
The Fairbanks Co.....	671
Wheeler Chemical Works	671
Jefferson Medical College.....	672
University College of Medicine.....	672
Vapo-Cresolene Co	673
Popular Science Monthly	673
The Terry Heater Co	674
W. D. Allison Co.....	675
Maplewood Sanatorium.....	675
Munn & Co.....	675
R. L. Polk & Co.....	675
Hargrave Chemical Co.	676
Presbyterian College for Women	676
J M. Echols Co.	677
N. Y Poly. Med School and Hospital	678
Single Centre Buggy Co.	678

Written Endorsements From More Than 8000 Physicians.

VIN MARIANI INTRODUCED NEARLY HALF A CENTURY AGO

"The Preparation which made Coca known as a remedy!"

Priority, Facilities and Processes of Manufacture

MAINTAIN MARIANI COCA PREPARATIONS INIMITABLE.

AVOID "COCA WINES" Extemporaneously made with **Cheap Wine and Cocaine.** Substitutes harm Patient and Physician and betray confidence in the unique properties of Coca.

VIN MARIANI

Represents TRUE COCA with a Sound Nutritious FRENCH WINE;

An Adjuvant to all other Remedies in

Convalescence — Wasting Diseases — Neurasthenia

And Allied Conditions from any cause.

THE COCA LEAF

A PERIODICAL ADVOCATING THE RATIONAL USES OF COCA MAILED FREE TO PHYSICIANS ON REQUEST.

Inquiries from Physicians Receive Ethical Consideration.

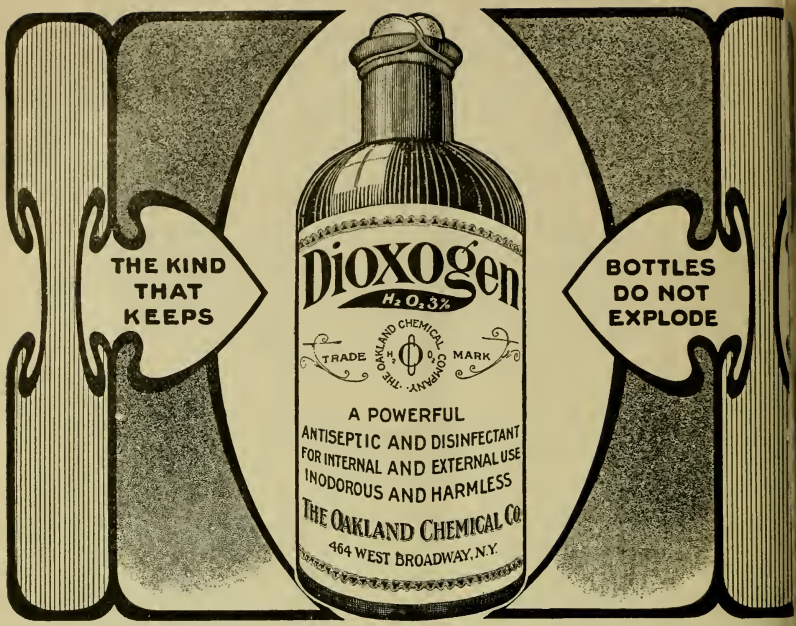
MARIANI & CO.,

52 West 15th Street, New York.

PARIS. LONDON. BERLIN MONTREAL. Laboratories: Neuilly Sur-Seine, FRANCE

ANTIKAMNIA QUININE & SALOL TABLETS
ANTIKAMNIA & SALOL TABLETS
LAXATIVE ANTIKAMNIA TABLETS
THE ANTIKAMNIA CHEMICAL COMPANY
ST. LOUIS, MO., U. S. A.
ANTIKAMNIA & CODEINE TABLETS
ANTIKAMNIA & QUININE TABLETS
SNOW CRYSTAL
LAXATIVE ANTIKAMNIA & QUININE TABLETS

ANTIKAMNIA & HEROIN TABLETS



BROMIDIA IS A REST-MAKER FOR RESTLESSNESS. IT GIVES CONSISTENT NERVE REST. IT DOES NOT LESSEN THE SUPPLY OF BLOOD TO ANY ORGAN OF THE ECONOMY, AS THE BROMIDES ARE SURE TO DO. IT IS A HYPNOTIC.

FORMULA:—15 grains each Chloral Hydrate and Purified Brom. Pot. and 1-8 grain each Gen. Imp. Ext. Cannabis Ind. and Hyoscyamus to each fld. drachm.

ECTHOL
IODIA
PAPINE

BATTLE & CO., CHEMISTS CORPORATION, ST. LOUIS, MO., U. S. A.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

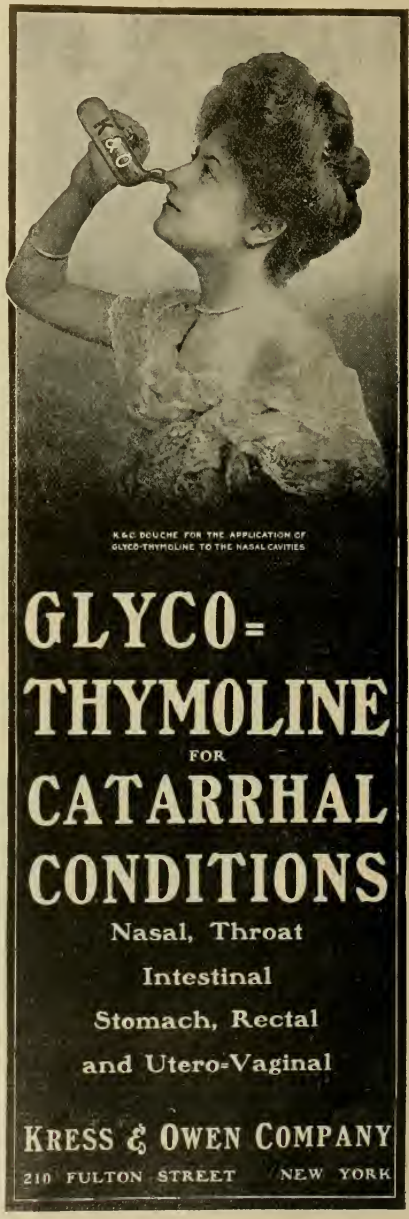
llicular Tonsilitis.—(By Geo. A. itt, M. D., Philadelphia, Pa.,).—his disease, so common among g children, Glyco - Thymoline ess) may be employed with advan- Its exosmotic properties is ex- ely serviceable in reducing the size e swollen glands. The enlargement t to subside slowly, even after the e stage of the inflamation has pass- Children who are old enough to le may employ the remedy in this ner. In those too young it may be ed upon absorbent cotton. Repre- tive cases are:

se 1.—A boy, 11 years of age, had red for a day from headache and , with pain in swallowing. Both ls were red and swollen, especially right, which was studded with ies of exudation from the crypts.

se 2.—A girl, 15 years of age, had a chill twenty-four hours previous- r throat felt sore and it pained her wallow. The glands of the neck swollen and there was fever. tonsils were considerably enlarged. crypts were exuding their charac- ic discharge.

se 3.—A young woman, 19 years e, was attacked by vertigo and lost ciousness. Twelve hours later tonsils were found greatly swollen, st meeting in the middle line. The cal glands were moderately en- d. The surface of the tonsils was d by exudation.

ese three cases were all treated ssfully with Glyco-Thymoline ess) as described above.



THERE IS NO OTHER

reason for the conservative scientific physicians' unqualified endorsement and extensive employment of

GRAY'S Glycerine TONIC Comp.

than the simple fact of intrinsic merit. It yields incomparable results in general debility, anæmia, malnutrition and nervous exhaustion.

THE PURDUE FREDERICK CO.,
No. 15 Murray Street, New York.

Dr. Crowell's Private Sanitarium

FOR THE TREATMENT OF

Alcohol, Tobacco and Drug Addiction

Special Apartments and Nurses for Lady Patients.

S. M. CROWELL, M. D., Medical Director, 10 N. Church St., Charlotte, N.

"No physician can afford to be indifferent regarding accurate filling of his prescription

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

OL. XLIX. CHARLOTTE, N. C., DECEMBER, 1903. No. 12

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

TERMS:

ıbscription $1.00 per year, in advance.
ıbscribers failing to receive the JOURNAL should notify us within the month and the omission will be supplied. Subscriptions may begin with any number.
ceipts.—The receipt of all money is immedately acknowledged.
portant Notice.—Subscribers wishing the JOURNAL stopped at the expiration of their paid-in advance subscription must notify us to that effect, otherwise we assume it their wish to have it continued expecting to receive a remittance at their earliest convenience.
e Notify all subscribers when their paid subscription expires.

EDITORIAL.

UICIDE IN THE UNITED STATES.

That there is an increase in the rate suicides in this country is evident to very one conversant with current literature, lay or medical, and the subject one of interest to the physician. The rge majority of suicides show some dications of mental derangement or at ast depression before committing the t, and there is much ground for conidering the act as an evidence of inity. Hence its treatment and prention is especially within the domain the profession. That its entire prention is impossible is fully recogzed, and that the treatment of cases tempting or threatening suicide is difult outside of institutions for the care the insane, all will admit. These ses are not easily recognized even by e physician except when there is me overt act or direct threat showing e tendencies of the mind.

By far the greater per cent. of suiles are of a melancholic type, and hile the public often considers these mild cases of insanity to be treated home, the plan is rarely to be advised. What may seem to the casual observer only "a fit of the blues," may show plainly to the educated physician the dangerous tendencies exhibited. Spitzka says "a downcast expression of countenance, a frequent recurrence of causeless fits of depression, frequent sighing or perhaps groaning, possibly dilated pupils, and a contracted condition of the arteries, may be the sole, but sufficient, indications" to put the physician on his guard.

The duty placed upon the physician of advising that the cases under consideration be placed in an institution for the insane is an unpleasant one. The repugnance to a sojourn in such an institution, be it called by whatever name, or for whatever cause the patient may be committed, is widefelt. There is, with the public, a certain stigma connected with being, or having been, an inmate of an insane asylum that attaches itself to both the patient and the family. In some localities and with some peoples this is but little short of the disgrace attending a sentence to the penitentiary.

Confinement in an institution for the insane or excessive vigilance in watching a patient with suicidal tendencies, will prevent the consummation of the act. Appropriate treatment for the mental condition will often give temporary or permanent relief. This is when it is known that suicide is contemplated. It is that class of patients not seen by the physician, and not giving any intimation of an intention to commit suicide, that it is impossible to prevent. It is this class that is making the increase in the rate of suicides.

From the *Journal of the American Medical Association* we make the following clipping (editorial):

"The *Journal* has previously noticed the communications publisher by Mr. Frederick Hoffman, of the Prudential Life Insurance Company, in the *Spectator,* on the subject of suicides in the United States. In that journal, August 27th, he gives a review of the suicide records of fifty of the principal cities in this country for 1902, with a comparison with the ten years preceding—1892 to 1901, inclusive. The record shows an increase in the rate during the year in twenty-eight towns, a decrease in twenty-one, and in one small town only was the ratio unchanged. The total gives the decided increase of from only twelve in 1890 to over seventeen per 100,000 of the population. Another table shows that the suicide rate has increased during the past thirteen years from twelve per 100,000 in 1890 to eighteen per 100,000 population in 1902. The gradual progressive increase would indicate that a still higher ratio may be reached in the future. To still further illustrate the importance of the subject Mr. Hoffman tabulates the suicides in New York city from 1804 to 1902, showing a marked increase during the last twenty years, though previous to that time there had been a fa wlich was quite marked between 18 and 1868. The suicide rate during tl first quarter of the century was muc higher than during the second, while i the last one-half it has gone far beyon the earlier figures. What these figur indicate is perhaps a subject for son speculation; the great increase of u ban population, the vast influence of th foreign element in our population, man of them coming from countries whe suicide is much more prevalent tha here, and the increasing stress of moc ern life and the arduousness of its co ditions must all have their effect. The also show that in time of great nation excitement, as during the 60's, ther may be a decided fall in the suicid ratio to be made up for afterward, pos sibly as the latter results of the speci form of stress at that time. The figure Mr. Hoffman gives, as stated, are fro fifty selected cities, probably those i which the suicide statistics were mos available and most reliable. Still th omissions of such places as San Fran cisco, Denver and Kansas City are no table and probably may have some in fluence on the general ratio. A larg number of smaller towns are nor includ ed in the list, though fully as impor tant and as large as some that are in cluded. Taking it altogether, however the statistics probably give us a fai showing as to the suicide ratio and it variations in the United States."

An exhaustive study of the causes o this increase in suicides would be time ly, and is much needed. This study w do not propose to make, but will ad vance an idea in connection with th subject. It is well known that the men tally unbalanced are easily led by sug gestions. The sight of a weapon sug gests its use. A newspaper account o a suicide, with all the details, whys an

erefores, and the minutia of preparation and consummation of the act leads ne one else to the thought, and another suicide is added to the list. Suies are largely (but not wholly) epmic. This has been noted for many rs, and the publicity given them in press of the day, while not entirely ponsible for it, has a great leaning on it. Not only is suicide itself epinic, but the means of its commission often the same for what might be med the special epidemic. In the last ee weeks one daily paper has given counts of three suicides—all by the of the pistol. In one county last year writer knew of four suicides in ee months—all by hanging—two in ns. We believe that if less publicity re given to these cases the result uld be beneficial.

A curious feature of this subject is rare occurrence of a suicide in the gro race. This was brought forcibly the writer's attention twenty years , and since that time only four suies in the colored race have been ed. Whether this is from the ne-'s inherent love of life, we are not pared to say. There are some of the her and more complex forms of inity to which he is not so liable as is Caucasian, and this may be one of m.

REATMENT OF FUNCTIONAL HEART TROUBLES.

The term functional disease, as apd to heart troubles without organic ions, while it has the sanction of g-continued use, both with the proion and the laity, does not convey idea of the chief etiological feature its production. The large majority these troubles are of neurotic origin, d the term cardiac neuroses comes nearer giving the etiology of the conditions usually presented. As the term functional, as applied to a cardiac derangements is understood by the public to mean something that is not serious, and to us a tendency to allay the fears of the patient—a great advantage in the treatment—its continued use is advisable, though not fully meeting the demands of a correct nomenclature.

The recognition of the neurotic character of the trouble, and a study of the special neuroses of individual cases, will add much to the physician in relieving the mental and physical condition of the patient. The indiscriminate administering of digitalis, alcohol and similar remedies to every case presenting itself when a murmur or other adventitious sound cannot be detected at once, is pernicious. These remedies are good in their place and they have a place in the treatment of cardiac irregularities, but care should be exercised in determining the necessity for their use.

There are many symptoms pointing to a probable diagnosis of functional disorder, but the exclusion of organic disease by an examination of the heart is the one to be relied upon chiefly. When this can be done in a patient of nervous temperament, the diagnosis is practically confirmed. When the patient is seen for the first time during one of the paroxysms, or "spells," the first indication is to allay the excitement and quiet the nervous manifestations presented. The manner and assurance of the physician will do more towards accomplishing this than the administration of medicines. While those disorders are distressing to both patient and friends, they may be assured, with perfect confidence, that the result will not be fatal. The administration of morphia, preferably by the hypodermic method, is good treatment for the

paroxysm in nearly all cases. Brandy or other alcoholic stimulants is a fine adjunct to the treatment, especially when there is depression in either the rate or force of cardiac action. The diffusable stimulants, of which we prefer the aromatic spirits of ammonia, are to be administered if there is contraction of the arterioles, indicated by a pale countenance, coldness of the skin and extremities, and a small contracted pulse, and this even if the pulse be rapid. The object is to flush the surface and extremities with ærated blood. Nitroglycerine, hot teas, and warmth applied to the extremities and over the heart accelerate this. In those cases presenting a full pulse, flushed countenances and warm, moist skin and extremities, the diffusable stimulants are contra-indicated. Bromide of potassium will act better in this class, as it contracts the arterioles and quiets the nervous excitement. Babcock advises aconite and cold to the pericadium, which we have found beneficial.

When pain is a prominent symptom of a paroxysm, nothing acts so promptly and beneficially as morphia combined with nitroglycerine, in cases of contracted or feeble pulse. Personally we prefer avoiding the use of opiates or alcohol when possible, on account of the tendency in neurotic persons to contract drug habits.

The treatment after the paroxysm, and as a preventative of future attacks, must be diverted to the underlying neuroses. Those of reflex origin are probably the largest class. In women diseases of the uterus and appendages and the menopause are sources of much functional heart trouble. In men, the digestive organs are more often at fault. Hysteria plays a very prominent part in these disorders, and great care is often necessary to properly meet it. As there are no anatomical pathological changes in the heart far as we are able to determine, little can be done in the way of tr ment directed especially to the h This is probably one cause of so m failures to relieve these patients. remedies are applied in too haphaz a manner, directed to the heart it without considering the origin of trouble.

Finding no organic lesion in the h in a case complaining of cardiac ir ularities is not sufficient grounds the administration of a placebo or missing with some routine treatm Digitalis is prescribed in these c without regard to the arterial tens or the pulse rate, the use of alco advised as a stimulant with as li consideration, and the patient practi ly told that nothing can be done him. Digitallis is useful in a cert per cent. of these cases, notably, th of reflex origin eminating from disea of the genito-urinary organs. It is pecially useful in hæmmoragic tend cies with a rapid, weak pulse and l tension. In spermatorrhoæ of pletho subjects, giving reflex disorders of heart, digitallis combined with brom of potash has given us good results.

In all cases presenting a condition anemia, from whatever cause, strich in some form will prove of advanta Our preference is in the form of tr. nux vomica. This is also usually indi ted in the digestive disorders.

Special attention should be given t diet and general hygiene. The sto ach should never be overloaded, n should articles producing flatulency taken. Moderate exercise in the o door air, a daily bathing of the feet cold water, and ten hours sleep in t twenty-four should be advised, and s cured, if possible.

ear of imperding evil is nearly al-
s present with the patients, and is
arious grades, from a slight uneasi-
s, perhaps of no well-defined ob-
or idea, to a genuine terror of sud-
death in one of the paroxysms. This
r should be relieved at once by the
sician's assurance of the benign
racter of the trouble. Its cure may
doubtful, and more than temporary
ef uncertain, but the disorder of the
rt is not of a fatal character. If
s'ble, the mind should be diverted
n a consideration of the heart or its
orders. The cure of these cases de-
ds largely, if not entirely, upon the
ef or cure of the underlying neu-
es, but the patient's confidence in
medical attendant and in his integ-
will do much toward relieving the
ntal anxiety, if not the physical suf-
ing of the patient.

GONORRHOEA IN WOMEN.

The lengthy abstract on this subject
this issue of the JOURNAL dwells on
evils of this disease, the knowledge
which has been growing for years,
possibly not yet fully realized to the
lest extent. The situation cries aloud
redress. The suffering of the inno-
t wife, brought to invalidism
ough no wrong-doing of her own,
peals to the profession for aid. As
profession it is a duty we owe to
s class of patients, so sorely afflicted,
ost hopeless and despondent, to give
martyrs our best efforts for alle-
tion.

The present state of our science, as
nonstrated by the work and writings
its foremost advocates, shows medi-
e to be hardly palliative in the worst
ms of the disease, and entirely pow-
ess as to cure, and surgery only
gthens life at the terrible expense of
rendering the victim incapable of fur-
ther procreation of her species, and of-
ten then with years of suffering to en-
dure.

The gratification of the lusts of man
in the days of youth and early man-
hood has entailed upon the woman se-
lected for his help-meet through life
days of sorrow and suffering. Let us
believe it was done unwittingly, and
that his medical adviser acted in good
faith when he pronounced him cured
of his infection. Yet the knowledge
has been forced upon us that gonor-
rhoæ, even in the male, is not cured
when there is no longer a discharge.
At the same time the lesson has been
given that, in the female, when once
infected, a cure is problematic, and the
only safety is in prevention.

When we turn our attention to the
question we find it hedged with diffi-
culties almost insurmountable. The
evil of illicit cohabitation is so wide-
spread, and with the male sex, not con-
fined to any class of society, that a re-
striction is so impracticable that a
thought of it seems almost absurd. So
long as there is such cohabitation, and
of an almost indiscriminate character,
infection will continue, and the uner-
ring wife will suffer for the lusts of
her husband.

The law does not offer a remedy,
though it boasts of its protection over
the weak, as against the encroachment
of evil and wrong-doing. It will grant
a divorce to the wife for an infectious
disease contracted from her husband,
provided he was diseased at the time of
marriage, a remedy repugnant to most
women, and one not often sought. A
civil suit for damages would probably
be admissible in cases other than be-
tween husband and wife, though many
difficulties would be presented in main-
taining such a suit. On this subject

the *Buffalo Med. Journal* (editorial) says that recently the Paris and Munich courts have fined heavily and punished by imprisonment men convicted of knowingly communicating a venerial disease.

The suggestion has been made that houses of prostitution should be licensed and placed under medical supervision, as a check to the spread of venerial diseases. Without stopping to criticise the moral aspect of such licensing, its utility can well be questioned, for it would be well nigh impossible to confine all illicit cohabitions to houses of this character. In large cities, possibly the larger per cent. of venerial diseases is contacted in brothels, but in the country at large by far the greater number comes from other sources. Houses of prostitution have been licensed and regulated in European and American cities for years, yet if we are to accept the statements of gynecologists and genito-urinary surgeons, and our own observations confirm the statements, venerial diseases are on the increase.

If infection is be controlled by legal enactment something more radical than has yet been attempted will be necessary.

While not meeting the indications fully, much can be accomplished for future generations of women (and men) by a course of education, on the part of members of the medical profession. To do this work effectually the boys should be informed of the evil consequences of an impure life, in their early days, beginning at the age of puberty. The danger of infection to themselves and the difficulty of a permanent cure should be placed before them in no uncertain light; and the danger, almost certainty, of communicating the disease to the woman he should mar with its effect upon her, should be giv every boy and young man in the lar It may be argued that this is the du of the parent, and possibly if the pare was informed on these questions might afford to leave it with them. is the ignorance of the laity on the matters that has produced the resu as we find them today; an ignoran that no one can combat except the me ical man.

This education can be pursued in se eral ways: By distributions, or advi ing good books and pamphlets on t subject; by private conversation wi boys in the families of our patients, ar by lectures to classes and schools t members of the profession. The nee of the situation is a great one, and worthy of the best efforts of ever member of the profession.

A State of Nature.—Our Englis cousins use "left off" for our "cast off, as applied to second-hand garment The following advertisement recentl appeared in a London paper: "Mr and Mrs. Hardy have left off clothin of all kinds. They can be seen any da from 3 to 6 p. m."—*Lippincott's.*

Every function of the body is con trolled by the nervous system, hence just to the extent of the nerve lesion will there be a depressison of the vita forces. The experience of the profes sion proves that one of the best possi ble remedies for this condition is Cel erina, in teaspoonful doses, four or five times a day. No one, after an intelli gent use of Celerina, will deny its pow er to give renewed energy to the whole nervous system.

The Carolina Medical Journal

COLLABORATORS.

T. Bahnson, M D., Salem, N. C.
Howell Way, M. D., Waynesville, N. C.
Allison Hodges, M D., Richmond, Va.
Vestry Battle, M. D , Asheville, N. C.
D. G. Thomas, M. D., Wilmington, N. C.
. Munroe, M D , Davidson, N. C.
nning Simons, M D , Charleston, S. C.
C. Baker, M. D , Sumter, S. C.
R. L. Payne, M. D., Norfolk, Va.
H. S. Lott, M D., Winston, N. C.
J. W. Long, M D , Salisbury, N. C.
H. A. Royster, M. D , Raleigh, N. C.
Albert Anderson, M. D., Wilson, N. C.
Francis L Parker, M. D., Charleston, S C.
Chas. W Kollock, M. D., Charleston, S. C.
Davis Furman, M. D., Greenville, S. C.
F. Julian Carroll, Summerville, S. C.
nslation and Foreign Reviews, Richard H. Whitehead, M. D , Chapel Hill, N. C.

The Editors are not responsible for the views of Contributors.
Contributors for the Original Department of The Journal are received, with understanding that they are contributed exclusively to this Journal.
Illustrations necessary to elucidate the text will be provided without expense to hors when suitable ink drawings or photographs are furnished.
Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession solicited for publication.

ORIGINAL COMMUNICATIONS.

A Clinical Report.*

R L Gibbon, M D , Member of Medi- al and Surgical Staff Presbyterian Hos- ital, Charlotte, N C.

A. D., aged about 20 years, was ked up by a train crew near Con- d, N. C., and brought to the hospi- at Charlotte. The railroad authori- supposed that the patient had fallen m the train while in an intoxicated ndition.

Examination at the time of entrance the hospital showed a fairly well de- oped young fellow in a comatose ndition, slow pulse and respiration, pupils unchanged. There were ne abrasions of the skin on face and oulder, but no other marks of trau- tism. A careful examination of the ad gave no external evidence of in- y. The case was pronounced one of ncussion of the brain and the patient on appropriate treatment. Some urs after admittance he became de- lirious, throwing himself about and requiring the constant attention of a nurse to prevent his falling out of bed. This restlessness gradually grew worse and preparations of chloral and bromide and subsequently morphine subcutaneously were resorted to, but without result. The second night he became so violent that additional help was needed to control him. The usual drugs having so signally failed, he received a hypodermic of apomorphia, 1-40 gr. The effect was prompt and happy; in fifteen minutes the patient was quiet, apparently in a natural sleep, and remained so for four hours. At the end of that time the restlessness returned and the dose was repeated with similar effects. This treatment was continued at intervals of 3 or 4 hours for the next twenty-four hours. At the end of that time the patient began to show signs of returning consciousness, and in a few days was convalescent. Strange to say, the apomorphia produced no nausea or vomiting until

*Read before the Charlotte Medical Soty.

there was a partial return of consciousness.

I do not remember to have seen this drug recommended anywhere for such conditions as I have described in the foregoing case, and being somewhat interested, I made a cursory review of the physiological action of apomorphia as laid down by several well-known works on materia medica.

As you are aware, apomorphia is an artificial alkaloid, made by adding hydrochloric acid to morphine or codein and subjecting the mixture to a high degree of heat. Physiologically it acts upon the vomiting center in the medulla and is the most powerful and certain emetic we possess. Butler describes its action upon the circulation as stimulating in small doses, raising the arterial tension by stimulating accelerator nerves and vasomotor centers. Large or toxic doses produce delirium, convulsions and ultimately paralyze the motor and sensory nerves, producing death by asphyxia.

Under the head of therapeutic uses, Shoemaker quotes Rorsley as having found it useful in controlling convulsions, hysterical and maniacal, and also states that L. Guinard has employed apocodein which you will recognize as the corresponding alkaloid derived from codein, as a hypnotic, without producing nausea or vomiting.

I can offer no very clear explanation of the manner in which the drug acted to produce a quieting and hypnotic effect in the case under discussion. Its employment by me was purely empirical, being based upon an experience with it in cases of delirium due to an acute mania. I have noticed in these cases of brain disturbance as witnessed in the instance under discussion, that the emetic effect is much less marked than in other conditions in which I have used it, say in spasmodic asthi Here the emetic action is quite decid It is evident, therefore, as a result my own experience as well as fr that of others, that this drug in cert circumstances has a well marked h notic effect. Authorities claim that ocodein has this latter quality to higher degree than has apomorphia.

Case 2. Mrs. L., was brought to Presbyterian Hospital by Dr. Edd man, of Gastonia, who had some th months previously discovered a v suspicious condition of the uterine c vix. The patient had recently giv birth to a child, hence her delay in se ing operative treatment. Mrs. L. w a large, well nourished, but anaem woman, aged about 40 years, the mo er of six children and had always be healthy. A physical examination rea ily determined the nature of her trc ble. The uterine cervix was ulcerat and deeply infiltrated, the ulceration e tending a short distance on the left v ginal wall. A careful bimanual palp tion discovered no apparent infiltrati of the peruterine tissues, or adjoini organs. The patient was advised the malignant nature of her disease a also of the character and danger of operation, such as would be required her case. Her mother had died uterine cancer, and she readily consen ed to anything that afforded even a ter porary relief.

The operation, a complete hystere tomy, was done on April 10, 1903, ar presented no features of special inte est. The crucial point in a comple hysterectomy is the securing of the ut rine arteries on each side prior to amp taring the upper part of the vagin The low point at which it is som times necessary to apply the ligatu and the possibility of including one both of the ureters in your ligature

akes this part of the operation not in-equently tax the skill of the surgeon. me operators cut the artery and then ize it with forceps, but when it is cessary to amputate well down in the gina, or when the vagina is unusual- short, this may prove a matter of nsiderable difficulty. On the other nd, it can very readily be done when e uterus is separated by amputating rough the neck—supravaginal hys-rectomy. In the writer's case the ar-ry was ligated en masse; the perito-um and bladder being reflected back, small opening was made in the an-rior vaginal wall and a correspond-g incision in the posterior wall. With e forefinger of the operator inserted to the vagina through the anterior ening and the thumb on the outside the band of tissue composed of the teral vaginal wall, the uterine artery uld readily be felt and secured by eans of a curved needle at as low a int as necessary, and with a minimum ance of including one of the ureters. lthough the cancerous cervix had en thoroughly curetted just before e abdomen was opened, the necessary aniuplations and the dragging of the seased cervix through the incision ad to an infection, which showed it-lf in a stitch abscess of considerable tent and kept the patient in bed a eek longer. She was, however, ena-ed to leave the hospital in four weeks. he progress the disease had made in is case does not offer the best prog-sis as regards recurrence, but when st heard from some months after her turn home, she was in good health.

The usually accepted facts of uterine ncer are so well known that I hesi-te to dwell upon them, even briefly, it its early recognition, in the present ate of our knowledge, is a matter of ch stupendous importance that we cannot be reminded too often of the duty imposed upon us of always being on the alert to detect its insidious beginnings. Its clinical history is at best a sad and gloomy one. During its course of one or two years the unfortunate victim is the pitiful prey not only of excruciating pain, but of self-disgust and loathing, while always in the prospect is inevitable death.

The uterine cervix, like all other ostia, such as the lip, rectum, caecum pyloris, etc., is the peculiar seat of malignant disease. One-third of all cancers in female subjects occur in the cervix. The disease is said not to occur under seventeen years of age—the liability to it increasing from 30 to the menopause. It is also frequent between 50 and 60. The peculiar susceptibility of multiperous women is well known, and so far as our present knowledge goes, the sole means of prevention lies in a careful repair of all cervical lacerations. The predilection of the disease for the scar tissue of old lacerations in the cervix has been frequently remarked.

The operation for lacerated cervix is usually so satisfactory in results that it is remarkable the operation has not a more general use. Besides being a prophylaxis, to an extent, of uterine cancer, the removal of hard cicatrical tissue and repair of the laceration accomplishes more for the cure of obstinate catarrhs and erosions of the cervix than does months of the bunglesome and unsatisfactory tampon treatment to which many of these cases are subject, drifting from physician to physician and at the end of years, like the woman of Scrupture, are nothing the better but rather the worse.

To summarize then, it is our duty to advise the repair of cervical lacerations both as a cure of present symptoms,

and as a prophylaxis of cancer, and to constantly bear in mind the possible presence of malignant disease in all women of susceptible age who come to us with complaints of leucorrhœa, or metroraghia. A timely examination may enable us to save an otherwise doomed life.

Case 3. On September 2, 1903, I saw Z. F. in consultation. Patient was a young man of 22 years, and his physician gave the following history of his illness: About one week prior to my seeing him, the patient was stricken a severe blow just above and to the right of the pubic symphesis. The injury was caused by a piece of board forcibly thrown from a ripsaw. The patient suffered considerable shock and pain, with a temperature of 102 to 103 F. for the next few days. The pain and soreness then gradually disappeared, the temperature became normal and his physician ceased to visit him. At the end of a week patient had a chill with return of severe pain and tenderness in the lower abdominal region. The symptoms were temporarily relieved by purgatives, but after a few hours the pain returned and tympany began to develop. When first seen by me, the patient presented the appearance of a man with marked septic intoxication—he was cadaverous in hue, apathetic, nauseated and unable to retain food or drink. The temperature was 100 F., and the pulse 112 and quite weak. The abdomen below the umbilicus was considerably distended and tympanic, but no mass or tumor of any kind could be made out. The bowels had not acted in 24 hours, although previous to that time they had been freely moved. From the rectum the patient passed a bloody mucus. There was a slight discoloration on the abdomen marking the location of the blow.

In attempting to use a rectal tube obstruction was encountered which, digita examination, could be felt as large mass low down in the pelv pressing upon the anterior rectal w and effectively obstructing the bow The mass gave a slight sense of fluct ation. The patient's consent havi been given, he was moved the next d from his home in Monroe, N. C., to t Presbyterian Hospital in Charlot Upon his arrival there the mass w opened through the anterior rectal w and about two quarts of very fo smelling pus evacuated. An attem to keep a rubber drainage tube in t abscess cavity having proved troubl some, the pus was allowed to dra through the incision in the gut, ca being taken that the opening did n close up too soon. The subsequent hi tory of this case was uneventful and l was sent home in three weeks' time.

This case is interesting as illustra ing the difficulty of forecasting the co sequences of severe blows upon the a domen, either in their immediate or r mote effects. Here was a case th gave every indication of a safe recover only to develop a localized peritonit and abscess one week later.

It is also of interest to speculate a to the manner of abscess formatio Did the blow rupture the bowel and b allowing the escape of fecal matter s up the peritonitis, or was there a haem toma which after the elapse of a fe days became infected? I hardly thin the history of the case will support th first hypothesis, nor is the last a ver likely explanation. A more plausibl theory seems to be that the integrit of the intestinal wall was impaired b the contusion, permitting the passag of bacteria into the peritoneal cavit and setting up a localized peritoniti with abscess, very much in the sam

anner as sometimes happens in ap-ndicitis.

A last lesson may be learned as to the ramount importance of a rectal ex-ination in all cases of pelvic disturb-ces. In the female one does not of-n neglect a vaginal examination, and e same rule should hold good in the le as respects a bimanual examina-n per rectum.

Report of Four Cases: Morobinism, Alcoholism, Etc.

S. M. Crowell, M D, Physician in Charge of the Crowell Sanatorium, Charlotte, N. C.

Case 1.—Dr. A., morphinism, male, e 45. Came into sanitorium Aug. th, 1903. An interview revealed that s average daily dose was sixty (60) ains, hypodermically, of sulphate of orphine; this amount being used be-een the time he got up in the morn-g and going to bed at night. A phy-al examination proved negative. He was of a very nervous tempera-ent. On the afternoon of the 18th, I gan the eliminative process, which nsists of giving such a combination purgative, diuretic, and diaphoretic, medies as to deplete the system rough these various channels above dicated. For this I gave him a hot th and the following: R—Hydrarg. lorid mite., Cascarin, each gr. 10; t. colocynth col., gr. 5; pul. Ipecac, . 2; Aloin, gr. 1; strychnin nitratis, . ¼ M. et ft. capsules No. 4. Sig. one psule at 4, 6, 8 and 10 o'clock. Gave m the last dose of morphine at 10 clock, when he took the last capsule. he next morning I gave him 2 oz. som salts, flavored with a small hount of ext. lemon. This gave him ur or five very free alvine discharges *thout griping or pain.* It should be ted that I began this course on an empty stomach, giving no supper; neither did he eat any breakfast. (All purgatives should be thus administered.) This combination also acts on the kidneys rather freely. By 12 o'clock the next day, i. e. the 19th, elimination had progressed very satisfactorily. Here it might be well for me to explain what I mean by elimination. I often compare it to breaking a hole in a dam; by so doing we get rid of the greater amount of effete or waste material that has been stored up in the various glands, organs and tissues for an indefinite time (as a consequence of the system being benumbed by the opiate) in the course of 12 hours. But as some water, waste, etc., remain in the channel and tributaries for some time after the removal of the "dam," so will this effete material be some time in "draining" completely from the human system after the removal of the "dam."

The combination given in the above prescription so stimulates the various secretory and excretory organs that this elimination will take place very rapidly, as the patient gets no more morphine to check the process. This you can't get if you use the gradual reduction method, as the repeated doses of morphine counteracts the eliminative process. While this process of nature is going on, to rid the patient of this material that I arbitrarily call effete material, the patient would naturally suffer some pain. So, just as soon as all these excretory organs have been thoroughly opened up and stimulated to activity the patient begins to feel uncomfortable or asks for his usual dose of morphine, whiskey or whatever drug he may be using, something must be given him to keep him from suffering while this elimination is being completed. The best sedative that I have found for this is hydrobromate of hyoscine.

In the case of Dr. A., he had no abstinence symptoms for approximately 24 hours after stopping the morphine.

This was on the evening of Aug. 19th, at 6 o'clock, when I gave him H. H. gr. 1-200 hypodermically. He then rested well, sleeping from 8 p. m. to 1 a. m., on the morning of Aug. 20th, when I gave him another 1-100 gr. hypodermically. The hyoscine was repeated then as following in doses of 1-100 gr.; on 20th, at 7 a. m., 9 a. m., 11 a. m., 1 p. m., 4 p. m., 7:30 p. m., 11 p. m. He rested and slept well during the night. The hyoscine was pushed, as it must be in all cases, to mild hallucinations. Between the times of giving the hyoscine, I always give pilocarpin hydrochlorate gr. 1-10, in order to open the pores of the skin, etc., to aid elimination. It also adds to the sedative and relaxing effects of the hyoscine and prevents the dryness of the mouth, produced by the hyoscine.

This was given in the above case. It will be noticed that this patient had in all only seven doses of hyoscine, the first being a minute one—only 1-200 gr. I always begin with minute doses for the reason that you might meet an idiosyncrasy in some cases. Troubles from this can be avoided by the minute dosage. You can generally tell whether you have such a person to deal with by the one minute dose. This patient, unavoidably, had to leave the sanitarium ten days after he entered. During the stay in it, he ate well, slept exceedingly well and gained in weight. After taking the last dose of hyoscine on the night of Aug. 20th, he did not take another dose of medicine while in the institution. The points of interest are the large amount he was using, and the short time in which he was cured. As he had to leave the sanitarium so early, and knowing his surroundings so well, I was afraid that he would r turn to his drug at once, but he did n I have kept in close touch with h since he left the sanitarium and kn that he has not gone back to using l drug or a substitute.

When he started on treatment a for five or six years previous, he d nothing but buy and use morphine. this writing, Nov. 24, his future pr pects are flattering, he having arrang to take up a lucreative practice in prosperous locality. He says that has no desire for morphine, absolutel nor has he had since he began trea ment. Some one will possibly noti the very large dose of strychnine a ministered. This is absolutely nece sary as the system is so benumbed morphine that ordinary doses woul not produce the desired effects. In pr scribing for morphine patients hero doses must always be prescribed.

His diet was select, and he was give hot baths every other day. In additio to the sedative effect exerted by hyo cine while the eliminative process i going on, it seems to act in some wa as a physiological antidote to the chron ic poisoning by opium.

Case 2.—Mr. B. Aet 55. Habit morphine and atropine.

He had been addicted to the habit fo about 15 years. He used from 15 to 3 grs. morphine, and atropine according ly, per day, hypodermically. He ha been unsuccessfully treated by th gradual reduction methods five or si times. Physical examination was neg ative except some sugar in the urine which is present in most morphin cases. His arms were perfectly raw from needle punctures, abscesses, etc He entered sanitarium Aug. 18th, 1903 and was given the same eliminative course and hyoscine, practically, as in case No. 1. He suffered none during

atment. Of course, he, as all drug ients are, was weak for a few days, t as he began to eat his strength ne back, as in any disease. His ap- tite was good at all times; digested d assimilated his food and slept well night. He told me that in cases ere he was previously treated, that s condition was such that he either t morphine during treatment, or uld get it, in some instances, on his ad home. He had no desire for mor- ine this time, during nor subsequent the treatment. I have been closely nnected with him since he took treat- nt and know that he has not re- sed. He looks several years young- and has gained several pounds in ight and says that he has no more sire for morphine or atropine than he had never used them. He remain- in the sanitarium three weeks, when left for the mountains of North Car- na, where he spent three or four eks.

Case 3. Mr. C., American, aet 50. sed laudanum for 20 years, and Bu- cu Inf. 15 years.

Came into sanitarium July 5, 1903. ave history of stone in bladder, for hich operation was performed several ars ago; however, the operation was t performed until he became a lauda- m habitue.

Examination revealed the fact that was suffering from a pyelonephrosis, stitis and prostatitis. In fact, when entered the sanitarium his tempera- re was elevated (did not take it) and was in a right serious toxemic con- tion. He gave a history of drinking om one-half to a pint of laudanum ch 12 hours, and from two to three llons of infusion of buchu each day. e was given the same preliminary urse as cases Nos. 1 and 2. Had me trouble in passing urine. Tem- perature fluctuated from 102 to 105 de- grees F. Gave him normal salt solu- tion, per rectum, and utropin, pilocar- pine and a few doses of nitro-glycerine and spartine sulphate. These were only for his kindneys and bladder and conse- quent troubles, however. After three or four days he had no trouble what- ever. Slept well and ate well, digested and assimilated his food perfectly. Af- ter staying in the sanitarium fifteen days, he went to the Presbyterian Hos- pital, where his kidney and bladder troubles were successfully treated for something over two weeks, when he went home, and he is today a well man, both in reference to the drug habit and and his kidney and bladder troubles. He has not taken a dose of laudnum nor a substitute since he came to the sanitarium, July 5th. Two and a half months after the treatment he had gain- ed 26 pounds in weight. When he came in for treatment he had apparently lost all pride and energy, but now he is back in business, where he is prosperous.

This is the only buchu fiend I ever heard of. If there is another case on record, I have failed to find it. I have written to physicians in charge of other sanitariums and inquired of prominent local physicians, and they all answer in the negative.

Case 4. Mr. D., American, aet 45. Whiskey habit.

Was treated two years previous by gradual reduction method. After a se- rious seige of sickness he began to take a little whiskey and rock candy for a persistent cough. This was followed by an excessive use of whiskey, and after having drunk it freely for seven months he came to my sanitarium, drinking from one quart to a half gal- lon each day. He had the usual elimi- native course, followed up by the ad- ministration of hyoscine, pilocarpin and

hot baths. His whiskey was stopped at 9 p. m., the first night he was in the sanitarium. After this drink he never again called for whiskey. During the hyoscine period he rested well, suffered no inconvenience, and as the effects of the hyocine wore off his mind brightened up, appetite was good, digested his food, never missed a meal and slept all night, as one in perfect health.

Forty-eight hours after he began on treatment I offered him a drink of whiskey. This was not accepted, saying that he had no desire whatever for it. But I insisted on his taking it, telling him, however, that it would nauseate and make him very sick in about five minutes; that I wanted him to see for himself that the whiskey would make him sick, so that he would not experiment with it after leaving the sanitarium. I gave him some of the very same whiskey he brought to the institution, assuring him that there was no ipicac or other emetic in it, which there was not. In about three minutes after drinking the whiskey he became nauseated and vomited and perspired for about thirty minutes, when I suggested that he would go to sleep and rest well all night, which he did.

This was a combined physiological and psychological effect which I attempt to produce in all class of patients. It aids very materially in fortifying them against relapse. At this stage they are more amenable to suggestion than any other except in that of hypnosis, which condition it is well to produce in patients amenable to it. Of course, the physician must select the patient and time for doing this, as it will not do to make himself appear absurd in the estimation of his patients.

This patient remained in the sanitarium two weeks, when he returned to his business, feeling better, he said, than for a long time, having no desi whatever for whiskey, the thought a dose of it being repugnant.

When he entered the sanitarium, h did so somewhat prejudiced against th sudden withdrawal, and in sympath with the gradual reduction method. A ter taking the treatment his opinio was reversed, he having tried bot methods.

Two weeks is too soon for the aver age whiskey habitue to leave a sanita rium, but this man was as well prepare at the end of two weeks as the averag one at three or four, and knowin something of his business relations, consented for him to go home, his busi ness demanding his presence.

Note that this man had been drunk virtually for seven months. He neve was sick at his stomach for a momen during treatment except when I gav him the whiskey for that specific pur pose. He never missed a meal, diges ted his food well and slept every night without a single dose of medicine. This might appear rather unusual, but this case might be called typical of the whiskey patients treated at my sanitarium.

"Contagious Acne"—A Note on Pathology and Treatment.

By Dr. Woodbridge Hall Birchmore, 21 Ann St, New York, N. Y.

Definition.—"Contagious Acne," if it is proper to give a specific name to a pathological movement-picture whose only claim to individuality is founded on its location, is a zymotic disease, made manifest as suppuration surrounding those skin contained fat glands which occur on the naked parts of the body, located, by reason of exposure, upon the face. This trouble has caused more mental suffering, in

pportion to the real mischief done, n has smallpox.

Occurrence.—The vast majority of unfortunate victims are women, this ause from the toilet methods they ve less chance of getting rid of the ection than men have, both having en exposed. The class of cases next number are adolescents of the male s, who are careless in matters of toi-, or who have not yet acquired the aving habit with its enforced cleans-g of the face; yet even in those who ave obstinate cases sometimes occur. e so frequent appearance of this uble upon the faces of young women ems a particular cruelty of fortune, cause in almost all cases they expose emselves from ignorance or inatten-n only and not from recklessness, and metimes they are to all intents inocu-ed by the act of another, both alike ing ignorant of the possible mischief ne. Of the actual number of cases curring among young women, a ma-rity will be found to be those with rk complexions and skins fully de-loped both anatomically and function-y, on account of the greater number perfectly developed glands in such ins. But, fortunately for them, the ins of such young women are almost rtain to rid themselves of the ma-ries-morbi, the yellow coccus of sup-ration, during the first stage of the sorder by the increased functional ac-n of the glands. It is also to be seen at in such a skin the increased action the glands in the vicinity protects ainst the extension of the diseased tion. For the reasons given, this uble is less often seen by the physi-an and identified in brunettes than in ond women, in dark women than in ir ones.

In blonde women it is far otherwise. these the skin is never fully develop-ed either anatomically or functionally, consequently the glands do not secrete sufficient oil to preserve the skin from contact with the dirt of various sorts to which it may be exposed, and when by any chance the materies morbi, the coccus, gains a footing an inflammation is set up, which causes the utmost distress to the unfortunate victims, because looking at the presentment of her disfigured face in her mirror, she finds it impossible to credit the physician's statement that, however distressing, the trouble is but temporary and curable, and that there is no real danger of damage to her beauty. Indeed to discredit the physician is but natural, for has she not seen upon the faces of friends scars said to be due to this very cause? Unfotunately in many cases the worse fears are really justified, the tissue beneath the skin is much injured and a scar hardly less deforming than that of smallpox is the result.

It is difficult for the observer whose interest is purely scientific, to avoid suspecting that the severity of the inflammatory action seen in many of these cases is due largely to the method by which they are handled. The conclusion from the point of view of the closest student can not be gainsaid, that owing to a misconception of the efficient cause the diseased action is allowed to extend to all intents and purposes unchecked and unhindered, until at last every one of the crypts of the fat glands in the cheek has become the locus of an inflammation so severe that it can by no chance heal except by the destruction of tissue and the formation of a cicatrix in its place. When this has happened the soft, smooth skin becomes hard or covered with a network of ridges, very minute indeed, yet quite sufficient to disfigure the face by reason of their multitude, and to cause much

suffering to the victim if she happens to compare the counterfeit image in the mirror with her recollection of her former beauty. There is really no doubt but that in many cases this is directly due to the methods of treatment used which find their basis in the mistaken assumption that acne is caused by "the elimination of some deleterious matter from the blood," for which matter the skin is an "emunctory apparatus." It follows thus at once that we must have two distinct pathologies, and two dependent treatments. One of these pathologies considers acne as a disease in which the whole body is implicated, the other accounts it a local disease with an efficient cause acting locally. The latter theory depends upon some of the most recent work of the profession, and upon it is founded a system of treatment which has been justified by results as no other system ever has been.

The Modern Pathology of Acne.— It has been said that according to our present belief acne is a local zymotic disease depending for its cause on "the yellow coccus of suppuration," and it is only by strict attention to the life history of this coccus that we can account for the clinical history of this disease. While the fact of inoculation may be considered as a matter of pure chance, the deposition of a fertile coccus, or a number of them, from the air upon the face of any person remaining in a public place for more than ten minutes must be regarded as inevitable. This is proven by the fact that culture slides have been exposed by many students in many places always with the same result, the contamination of the culture-slide. But this technical inoculation is very far removed from the pathological or clinical pre-requisite, for given the germ upon the skin we have only the possibility, not the certainty of infection, for infection is impossible unt the disease germs are actually in th crypt of the gland and are growin there. Because of this fact we can n look upon the contamination of the ski as equivolent to inoculation, but we fin in the life history of the coccus th cause and reason for the infection.

We are quite too much given t thinking of the various coccus forms a we see them pictured in books, or a the handsome stained preparations of cabinet, but these are no more the rea thing than is a marble statue a livin man.

Inoculation commonly, it may be in variably, takes place by the vital move ment of the coccus, a movement to som degree at least uniform with other lik movements of other similar forms. Thi conclusion depends wholly upon ob served analogies and not at all upon lif theories.

Every one is made familiar by rou tine studies with the reproduction b fission, but every one is not familia with the reproduction by other vita movements. These methods exist, how ever. In a few forms they have beer observed in this very coccus, in fact.

The sequence of steps is this: One o more, sometimes a large number of the individual cocci in a chain swell up, the cell contents is evacuated, and as a mo tile form crawls amoeba-fashion over the surface, in this instance of the skin until it finds a satisfactory lodgment. These exceedingly small masses of liv ing matter, the evacuated contents of the coccus elements, then cubes into the lumus of the fat glands by virtue of this vital movement and make their way down the duct to those cells which are the true gland tissue and there resume their ordinary life cycle.

This stage when the cocci by this vital movement have forced their way

the crypts of the glands, is the true
e of invasion, and when once the
i are in the glands and in point of
actually under the skin, it is plain
ny one that a simple washing of the
will by no means meet the needs
he case. The stage before this
le the cocci are outside the glands,
shall call the pre-invasion stage, and
shall discuss the treatment of the
ous stages seriatum in the course of
next few lines. The third stage is
of turgescence or swelling. As
as the motile cell has reached that
ion of the gland in which there is
nelium, it begins its usual growth
the chain in the epithelium. This
rally causes modification of the life
he gland and much variation from
h movement First the cells re-
the coccus, and by an increased se-
on the intruders may be washed
but more frequently the cells are
ly over-stimulated to their death.
is the third stage, that of swell-
and it is in this stage that treat-
t by massage of the face is so use-

his period is immediately followed
he period of serous discharge. Be-
ing as a true watery discharge,
h may be seen, with a magnifica-
of about five times linear, welling
from the mouth of the gland, in
course of a few hours increasing in
unt so that if it will dampen a
dkerchief pressed against the face,
secretion very quickly becomes
nous, and extending over the
ths of the nearest glands closes
also when coagulation takes place.
serous and later fibrinous dis-
ge swarms with actively growing
and if the discharge is carried to
ninfected area, it will at once set
he disorder, and it may even be
ed to another face by an inoculated

handkerchief, but the most frequent method is by direct contact of cheek to cheek in the affectionate embrace of women. It is the fact that the discharge may be conveyed by an inanimate agent as a handkerchief or the down upon a fan (this is not surmise, but history), which makes this period so dangerous. It would be much more so but for the fact that it takes at least two hours under the most favorable conditions for the coccus to reach the inoculable stage, and within this period the invader is removed in most cases by the toilet of the face.

If treatment has been successful, the disease movement goes no further; if unsuccessful, suppuration begins in the tissue about the gland. This inflammation is strictly curative and so far as the individual focus is concerned, should not be interfered with, but every precaution should be taken to prevent the pus or other discharge from reaching other crypts and invading them. This is the stage of suppuration, the stage in which treatment is begged for, but in which it is not only useless, but may do harm by excessive interference.

If left alone the small pustule breaks in the course of a few days and they using a powerful glass, to insure exactness of manipulation, and a very fine pair of forceps with teeth, the surgeon can secure a grip upon the little sack of connective tissue and lift it directly out of the pit. This removed, the small hole left, it looks large under the glass, will fill by a granulation tissue and in ten days all that will be left of the unsightly pustule is a tiny white spot about one one-hundredth of an inch in diameter, which in course of time disappears.

During this entire pathological movement we have but one duty—to secure

perfect cleanliness and prevent extension.

Treatment.—The proper treatment is prevention, the careful daily toilette. It is not enough that a "dab" at the face with a soft sponge is made, but a face toilette in all ways equivalent to the facial massage of men should be given to women also. In the stage of turgescence when the invaded gland feels like a shot under the skin and the irritation is the cause of a continual desire to squeeze and rub the focus of inoculation, the proper treatment is evacuation, the working out of the entire glandular contents down to the very bottom of the crypt. This can not be done by the amateur; it requires the expert operator. The man who can give a real massage of the face is an artist in his way and a rare one, and it is absolutely sure that the rarity of this disease in the adult male, notwithstanding his hourly exposure, is probably due to the all but universal habit of "having his face cleaned up" by the skilled masseur.

Enough has been said about the treatment of the suppuration stage.

In fact, the entire treatment is *cleanliness.* Not the perfunctory sort in which most persons indulge, but the real thing; the best is the daily ministration of the masseur; this not being at hand, the next best thing is the plentiful use of hot water and soap to remove the dirt, followed up by an abundant use of some effectual disinfectant and germicide. There is no need to give an extended list. Listerine is good and agreeable; others may readily occur to the practitioner. No preparation containing carbolic acid should ever be used nor one containing anything which will assail the living animal tissue. Of all now before the public that sold as bromo-chloron is the best—first, because it is absolutely without effect on healt animal tissue; secondly, because it absolutely certain to destroy any a every living vegital cell it meets; th is, destroy it as a functionating enti because it combines with a part of t cell constituents and makes the c functionally inert. In a word, conve the cell into "dead matter."

An illustration both of the course the disease and its treatment is sho by the following history:

When the pupils in a fashional school for young ladies, situated in u town New York, came together ag in the month of January, last, one them had a "small pimple" on her fa from which was freely flowing a wate discharge. In the course of the caress so freely exchanged by the said you ladies, this watery discharge w smeared on the cheeks of others. Th fact was recalled by sundry of t young ladies when they were questio ed in this regard. Within ten da every one of the young ladies had o or more pustules upon the face, and many cases there were a number them.

The physician in charge of the heal of these young ladies was early se for and made use of what he describe as routine treatment. He was convin ed that trouble was due to "indige tion," and practically all this effo which he was making to meet his nee was to give salines and wait for result Meanwhile the young ladies were b coming restive and the mistress was a ready in a panic. At this stage I wa brought into the case as a microscop ist. The physician had mentioned th cases as interesting and from his de scription I inferred that the diseas was zymotic, and probably was due t one of the suppuration causing vege tal-life-forms. Examination of the dis

arge, smear slides stained with "sap-
rine" left no doubt of the facts.
When the facts were made clear, the
ed of active local treatment was at
ce seen, and the following adopted:
Having removed everything remov-
le with soap and hot water, the faces
re bathed with bromo chloron con-
ntrated. This treatment was repeat-
three times a day. A man skilled in
ssage of the face was employed to
move the contents of the non-suppur-
ng glands; those which were suppur-
ng were neglected until mature.
Under this treatment the progress
the epidemic was effectually stayed.
ere were only two cases in which
w pustules developed by invasion af-
the massage and treatment with
mo chloron, and within fifteen days
m the time this treatment was begun
signs of the disease had disappear-
from the school, although six weeks
the routine treatment had done prac-
ally nothing for the unfortunates ex-
t make them uncomfortable.
In this school there were ten young
ies and ten cases of this so-called
ntagious acne;" five cases were de-
ibed by the attending physician as
vere," three as "very bad" and two
"very bad indeed."
Surely such treatment is to be pre-
red to that of "opening the pustules
l evacuating the contents," and leav-
a scar, which is inevitable with this
atment, but which is not mentioned
ong the "sequelae" in the books.
(Dr. Birchmore is a chemist as well
M. D., and does special work both
h the microscope and the balance.—
.)

The Treatment of Corneal Ulcers.

W. H Wakefield, M D., Charlotte, N C.

The general practitioner is often con-
ted by persons suffering from some
form of corneal ulcer, and he is, not in-
frequently, at a loss to know how best
to proceed with the treatment, as some
of these cases prove very tedious, while
others yield kindly to the simplest rem-
edial measures. I will not attempt a
description of the different forms of
corneal ulcers, as this can be obtained
from the text-books, but will speak sim-
ply of corneal ulcers in general. A few
words, however, in review of the anat-
omy of the cornea will aid in a clearer
understanding of the subject. The first
of the corneal layers is a continuation
of the conjunctiva and is made up of
of epithelial cells; the second layer is
called Descemit's membrane, is very
thin and is a protection of the third lay-
er. This coat, the third layer, is also
termed the proper substance of the cor-
nea and is made up of a connecting
system of lymph spaces (lacunæ) in
the corneal substance. These spaces
are connected by a network of canals,
and constitute that circulatory system
by means of which nourishment is con-
veyed to all the corneal tissue. The
two layers internal to this are thin and
when the third has been destroyed by
ulcerative action they are apt to rup-
ture. This aids in healing by reducing
tension, as will be shown later. An
ulcer in the cornea produces conditions
similar to those caused by an ulcer in
any other region, viz: congestion and
infiltration of the surrounding parts.
Since the cornea has no direct blood
supply, but derives its nourishment by
absorption, by means of its lymph sys-
tem, from the pericorneal vessels, those
vessels first become dilated and this
spreads to the whole conjunction, and
to the vessels of the iris. The increased
amount of blood in the iris causes it to
enlarge and the aqueous is produced
more rapidly and of a changed charac-

ter, being loaded with fibrinous material.

The swelling of the iris blocks in a measure the drains of the anterior chamber at the outer margin (the canal of Schlem) and intraocular pressure is increased.

Let us now see what effect this has on the ulcerating cornea. The first effect of the ulcerative action on the cornea is to cause it to soften at the point of ulceration, which is shown by its becoming cloudy (infiltrated). This process continues until the tissue breaks down, forming an open sore. The ulceration continuing, the third layer softens, swells and *the increased pressure from within crowds the layers of the cornea and the third or nutritive layer being softened by the inflammation, yields to pressure and its circulation is impaired, thus lessening the nutrition of the cornea, and aiding the ulcerative process.*

One of the first principles underlying successful treatment of disease is "remove the cause," "aid nature."

In the cases under discussion the congestion of the region around the cornea and of the iris interferes with the proper nourishment of the cornea, hence we should reduce congestion. This is readidly accomplished by using two drops of adrenalin sol., 1 to 1000 in the eye 3 to 12 times daily, being governed in its application by its action on the blood vessels of the eye and also on the heart. Bear in mind the object to be accomplished in the eye, viz: reduce its congestion. In some cases 1 to 5000 sol. of adrenalin applied every 2 to 4 hours will suffice. In thus reducing congestion you reduce tension and improve nutrition.

The ulcer is filled with pus and probably its edges are undermined. It should be thoroughly cleaned. This is best accomplished once daily by first inducing cocaine anesthesia and thoroughly washing the ulcer with the following:

Rx—

Acid boric c. p. grs. 15.
Sodium chloride c. p. grs. 7.
Aqua pura oz. 1.

With your hypodermic syringe throw at least half an oz. of this solution made warm, directly on the ulcer, thus really curretting its base and edges with the antiseptic sol., and washing out all loose germs.

Then apply under the lids some salve made by rubbing 5 grains of iodoform with 1 drachm of vaseline.

This salve fills the ulcer, and by covering the nerve ends exposed on the floor of the ulcer, it reduces the pain; it also hinders the development of the germs and restrains ulceration. Cocaine should not be used often, as it has a drying effect on the cornea, but it is scarcely possible to thoroughly cleanse the ulcer without first using it.

The iodoform salve can be applied after each application of ardrenalin. All these patients require a tonic, internally and externally. Internally, iron, arsenic and strychnine usually answer the purpose. Some of the more elegant and effecacious preparations useful in this state are Fellow's Hypophosphites, Pepto-Mangan, Gray's Glycerine Tonic Compound, and in strumous children, Hagee's Cordial of Cod Liver Oil. In cases of extreme prostration in which the ulcer shows a disposition to spread, I would advise the use of Bovinine dropped in the eye after each application of adrenalin, to feed the tissues, and for its antiseptic effects.

The administration, internally, every three hours, of a teaspoonful of Bovin-

ıe in water or milk, in these bad cases, followed by good results.

Externally, I always advise fresh air nd sunshine, when the weather will permit. I insist on my corneal ulcer cases wrapping the eye, so as to exclude the light, and taking an hour or so in the fresh air and sunshine daily.

ABSTRACTS.

Gonorrhoea in Women—The *International Medical Magazine* for October resents an interesting symposium on iis subject. The character of the conibutions, the thoroughness of its eatment and the importance of the uestion to the general practitioner is ır excuse for a lengthy abstract.

The general practitioner has not realed to its fullest extent the far-reachg evils of the disease as found in the male, or the importance of its prevenon. If this cound be accomplished, the fforts in the direction of prevention re, at least, very feeble. How to acmplish anything in this line is a quesbn we might ask. The editor of the *ternational Magazine* believes that e prevalence of gonorrhœa in this ountry is much greater than is comonly supposed, and can be largely acounted for by the great prevalence of nrestricted prostitution. He believes at all houses of prostitution should be galized and under thorough medical pervision. This would lessen gonorœa, be an advantage to mankind and inestimable blessing to thousands of nocent wives.

Questions on some of the disputed ints regarding the subject under disssion are asked of noted gynecolosts, viz., Prayor, Tabor, Johnson, Puls, elet, Jno. B. Murphy, Ford, and nall.

The answers given to these show at, in the opinion of these specialists, per cent. to 85 per cent. of pus tubes sulted from gonorrhœal infection. ord, with no hospital practice, says 10 per cent. and 12 per cent.

When the disease has gone beyond the internal os nothing short of surgical interference will cure. Medical treatment can be relied on short of invasion beyond the cervix. Murphy and Puls do seem to doubt a complete cure in any case.

As to the frequency of gonorrhœal vaginitis, it is rare, according to the experience of these contributors. In private practice, but few cases found, more in hospitals and clinics. Small says it is found only in the young and those not used to sexual intercourse.

The treatment for gonorrhœal endocervitis giving the best results is largely by local application. Prior dilates the os very gently and withdraws mucus by suction, afterwards applying strong tr. iodine, by application; more recently has used 30 per cent. sol. arglyrol with good results. Goelet uses negative galvanisms to drain the ducts and applies glycerine and iodine. Johnson uses the curet and antiseptics. Small uses cervical syringe and local applications.

The fifth question in the magazine is regarding the admisibility of local application to the corporeal endometrium in treating gonorrhœa in the answers to which there is a diversity of opinion. Small and Ford answer in the affirmative. James Tobar Johnson says sometimes, yes. Murphy says no. Pryor and Goelet say it is admissible through a return flow irrigation with mild antiseptics, but not otherwise.

Is hysterestomy demanded in all

cases of gonorrhœal diseases? What degree of conservation of the tubes, ovaries and uterus is justifiable in (a) acute and (b) chronic gonorrhœa? is the sixth question, and to this Pryor answers in the affirmative, and makes this statement: "The literature of the world does not contain a report of an authenticated case of gonorrhœal disease which has subsequently conceived and gone to full term." The others all answer in the negative and advise a conservation of the adnexia to fullest extent.

In diagnosing urethral gonorrhœa the concensus of opinion is that microscopic examination of the secretion is the only positive proof of infection. Goelet advises culture for verification. Ford claims there is a peculiar pouting of the urethra significant of gonorrhœal infection.

The eighth question is "Of what value is a microscopic examination of the discharge in the diagnosis of gonorrhœal (a) of the cervical endometrium; (b) of the urethra; (c) of Bartholin's glands?" In answer to this, all give precedence to the microscope, especially in acute cases. Small advises an examination immediately after menstruation, in suspected cases, should examination between times prove negative. Puls says the gonoccocci may be found in Bartholin's glands when absent in the cervix and urethra. In securing the discharge for examination, Prayor insists upon pressure being used instead of merely swabing the parts.

The ninth and last question deals with peritonitis and death as a result of gonorhhœal infection. Peritonitis occasionally follows an infection of the tubes, but is regional and death is rare. Johnson says it leads to invadilism and sterility.

Small contributes an article in this symposium on diagnosis of gonorrh in the female, giving the clinical fe tures of the disease, but still giving pre edence to the microscope as the only i fallible proof of infection. Urethral i fection has an incubation period from three to seven days, first ma fested by an itching and burning of t parts, followed by frequent burni and painful urinations. The meatus red, swollen, tender and has pouti lips. At first discharge is scant a muco-purulent, gradually increase and if urine is irritating, especially a ter menstruation with cervical infe tion, there may be an acute exacerb tion of symptoms.

Cervical infection alone is rare, ar gives no distinctive features. It is combination with some other infecte organ, and usually chronic in its natur To demonstrate its presence, a micr scopic examination just after menstr ation should be made. Gonorrheal e dometritis has no distinctive featur if infectrum.

Vaginal gonorrhœa is very infr quent as an acute infection. It is us ally found in young girls unaccustome to sexual intercourse, and newly ma ried women. The incubation period i from twelve to twenty-four hours, us ered in with heat and itching; the part are red, dry and swollen, soon followe by a mucopurulent discharge, becomin purulent later. The acute form usuall subsides in seven to ten days. No dis tinctive features of an infection in th sub-acute form. The chronic form pre sents itself as a granular ulcerative con dition of the posterior walls.

Traumatism in attempts at rape or i intercourse with undeveloped sexual or gans is the chief source of infectio in gonorrhœal vulvitis. It is foun largely in the very young and in in fants,. Sometimes infection is secon

ary cervical or urethral, where cleanliness is not observed. The same itching and burning sensations occur, followed by a mucopurulent discharge.

Great care must be taken before diagnosing an inflammation of Bartholin's glands as gonorrhœal, as it may be caused by traumatism, sexual excess, etc. The onset is sudden consisting of severe pain in the vulva, followed by rapid swelling of the parts, assuming a pear-shaped contour. The opening of the duct will be found red and swollen with pus exuding. In the chronic form the opening of the duct has a flea-bitten appearance.

A backward flow sometimes causes an infection of the rectum. The surface of the rectum is red and swollen, and the parts itch and burn. It is only when acute attack can be elicited or other parts are affected that the chronic form can be diagnosed.

Dorlander Writes of the Topical Treatment of Gonorrhœa in Women.—The plan of strong solution of nitrate of silver in specific vaginis has not come into general use on account of its severity. Doderlein's suggestion to restore the alkaline environment of the specific vaginits to the normal acid reaction for an abortive treatment, has not been substantiated. The newer silver salts potargol, 2 per cent. solution, and argyrol 5 per cent. to 20 per cent. are used with beneficial results. Acute gonorrheal urethretis should not be treated locally, but dependence placed on active disinfection and chemical alteration of the urine, for which bicarbonda and salol are recommended.

Chronic vaginal cases are treated with trichloraletic acid (1 per cent. to 3 per cent.) and methylene blue (1 per cent.), especially the latter, by painting the vault. The methylene-blue seems to have a special and decided chemical action, and used twice a week is a remedy of great value.

Montgomery's Subject in This Symposum is Gonorrhœa in Women.—The general practitioner regards gonorrhœa as a slight disorder. The gynecologists regard it as a cause of urethretic cystitis, ureteritis, pyaletis, and destructive of kidney structure. Through invasions by the genital canal vulvitis, vaginitis, endometritis and salpingitis occur. Their sequelae are found in hydorsalpinx, pyosalpinx, ovaritis and pelvic peritonitis. Through invasion, by way of the blood, the joints and blood vessels are affected, life is threatened and health impaired, all causing the gynecologist to consider gonorrhœa a more serious malady than syphilis. Syphilis may be cured but gonnorrhœa can not.

Only its manifestations in the uterine appendages and pelvic cavity are considered. Invasion of the tubal mucous membrane produces a swollen condition, hyperplasia of the folds occur, filling the entire cavity of the tube. The infection extends to the muscular coat, generally resulting in a complete closure of the abdominal end of the tube. Cases of pubic infection or early arrest occasionally recover without loss of function, though crippling is generally the rule, and if not destroyed ectopic gestation occasionally follows. Suppuration and agglutination between tube and surrounding visera may occur. The pus may remain quiescent, or be evacuated through the intestine, bladder, vagina, abdominal wall or peritoneum, the last the most dangerous, through the vaginal being the most desired. In such condition the nutrition of surrounding parts is affected, and is a menace as focus of ure-infection, though suppuration may not be present. The curability of an invasion of the

deeper structure is exceedingly doubtful. Every cold, debauch, or excessive venery may cause a new outbreak.

In the way of treatment, avoid operative measures during an acute attack. A vaginal incision to relieve a collection of pus is admissible. Rest in bed, restricted diet, careful toilet of external genitals, hot vaginal irrigations every few hours, of 2 per cent. solution of mercurial. After acute symptoms have subsided, a careful abdominal massage should be instituted, very gentle at first, gradually increased. For absorption of exudate, pressure by three to five pounds of shot on abdomen are employed, often supplemented by mercury or shot in gum bags within the vagina.

When such destruction has occurred that no operation will restore the functions of the organ, and its presence is a menace to life, it should be removed.

Paroxysms of Whooping Cough.—Sobel (*Am. Practitioner and News*) claims that whooping cough should not be allowed to run its course without treatment on the theory that it is a self-limited disease. The number and severity of paroxysms should be as limited as possible, as conserving the strength and hastening the cure. Internal medication has not succeeded in arresting the spasm of the glottis and accompanying whoop and a mechanical remedy is given which has proven very successful in his hands, for the past two years. The credit of the procedure is given O. Natgeli, and consists in pulling the lower jaw downwards and forwards at the beginning of the paroxysm, and before the whoop occurs. When in front of the patient, the flexed index and middle fingers are placed against the angle of the inferior maxilla, both thumbs alongside the nose and against the superior maxilla, and then pull downwards and forwa
If behind the patient, the flexed in
and middle fingers are placed agai
the angle of the jaw, the thumbs alo
side the body, the remaining fingers
neath it, and manipulate by pull
downwards and forwards.

Parents and nurses can be instruc
in this maneuvre, and the cure h
tened, as every spasm cut short or
rested, every whoop prevented, spa
the heart, lungs, brain and nervous s
tem from so much wear and tear.

This can be done while the child
asleep, the only contra-indication
its use being the presence of food
the mouth or esophagus.

The following conclusions from t
experience of many cases are given:

1. Pulling the lower jaw downwar
and forwards controls the paroxys
of whooping cough in most instanc
and most of the time.

2. The method is usually more su
cessful in older children than in youn
er ones and infants.

3. In cases without a whoop, the e
piratory spasm, with its asphyxia,
generally overcome, and in those wi
a whoop the latter is prevented.

4. As a single therapeutic measu
for the control of the paroxysms it d
serves a place in the treatment of pe
tussis, and is as sucessful as any sing
drug or even more so.

5. Mothers, nurses, and other atte
dants should be instructed in its us
in order that the oncoming attacks, e
pecially at night, might be arrested.

6. The manipulation is harmles
painless, and easy of application, witl
out any of the ill effects of drugs;
offers a maximum good effect with
minimum derangement.

7. The only contraindication to it
application is the presence of food i
the mouth or esophagus.

8. The patients treated in this manr are less likely to suffer from comcations or sequelæ than those treated ly medicinally; they emerge from the sease in far better condition, less exusted and less emaciated, because miting has been controlled.

9. It is advisable to try the maneuver other spasmodic coughs and laryneal spasms (laryngismus striduous, essure of enlarged cervical and bronial glands, influenza, glottis spasm in tarrhal laryngitis), although my exrience has seemed to show that it is r less efficacious in these conditions an in whooping cough.

10. This method, being directed ainly to the control of the glottis asm, does not preclude the advisabil- of supporting and sustaining the pant, guarding his gastro-intestinal act, establishing equilibrium in the rve centers, and affording him every ssible hygienic advantage.

11. It is particularly indicated in innces complicated with diffuse bronitis, brocho-pneumonia, convulsions, staxis, subconjunctival or subcutanus hemorrhage, or subligual ulcerain, and in those children who, by vir- of age, the presence of rachitis, rofula, or general debility are preposed to serious complications and quelæ.

Determination of Sex.—Shultz (*Buffo Med. Journal*) says that Shents' ews that the sex of children to be rn might be determined by modifyg the metabolism of the mother have t been accepted. On the question y should an ovum in one case proce a male and in another a female ld, Doederlein holds that the theory t the sex of the human ovum is detmined before fertilization cannot be held, and Lenhostek maintains that even in the ovary the ovum already has the character of the sex and the husband has no influence on the sex of the child. The latter theory Shultz has maintained since 1855.

The older the husband in comparison with the wife, the greater the proportion of male children to the general ratio of the sexes. The more demands made upon a bull or stallion, the greater percentage of male offspring produced. From these facts Doederlein concludes that it is not right to suppose the ovum to be primitively endowed with a definite sex.

One ovum or one testicle does not produce one sex, and the other ovum or testicle the opposite sex.

To reconcile these contradictory theories and facts this hypothesis is presented: That the male ova derived from the ovary of a young woman offer more attractions to the spermatozoa of an older man than the female.

(We are not prepared to disprove either theory advanced, but consider the question as yet unsettled. An old cattle breeder once asserted to us that after the first calf, he could always arrange for the sex of future deliveries, because the sexes alternate with the "heats" of the cow, every other "heat" being of the same sex. He bred fine milk cows for sale and nearly always had female calves dropped.—Editor.)

Copper in Syphilis.—Price, Medical Director in U. S. Navy, (*Med. Record*).—The baleful influence of syphilis is being more fully recognized every year, and its complete cure is doubtful. Navy experience shows the good effect of copper as an adjuvant to the accepted treatment. In old case 1-3200 gr. of arsenite of copper and gradually increased to 1-600 gr., if well borne. There is in old syphilis an intolerance

of the arsenite of copper not shown in any other disease, and it is sometimes given where there are no lesions but a condition of cachaxia suspicious of a syphilitic taint. The administration of 1-3200 gr. will occasionally produce prostration and almost collapse. When the arsenite cannot be taken, copper sulphate 1-30 gr. with blue mass is given. This, when tolerance is established, is pushed to 1-12 gr. three times daily, with blue mass to the extent necessary. On account of its tendency to excite neuritis, it is alternated with iodides, and laxatives and salines are used freely. He says:

"An experience of many years has led me to formulate my belief as follows:

"1. The treatment of syphilis in all its stages, inclusive of the cachetic and the parasyphilitic forms, is well founded on the sulphate of copper in the average dose of 1-30 gr., aided by such a quantity of blue mass as is borne readily by the patient.

"2. In old syphilis in any form the copper salt must be given in minute doses, and gradually increased as tolerance is established, until the usual dose of 1-30 gr. is given, when the mercurial should be added in a rather small dose. It is sometimes better to give the medicine only on alternate days.

"3. In acute syphilis the copper salt is to be given in the dose of 1-30 gr. and the mercurial added at once and increased as much as the patient will tolerate, in order that the disease shall be neutralized and eliminated as completely as possible.

"4. Iodine, iron, arsenic, and tonics of any sort, while useful, occupy a subordinate place in the treatment of syphilis.

"5. Alcohol, and especially tobacco, should be forbidden to syphilitics."

Salt in Nephritis.—Kellog (*Mod. Med.*) writes of the injurious eff of chloride of sodium in nephritis, incidentally of its unnecessary use an addition to food. The blood c tains two kinds of chloride of sodiu chemical chloride of sodium and cl ride of sodium in organic combinati from which it seems probable that cl ride of sodium is not at all essentia health * * * * the syst being able to use only the chlori which exist in organic combination foodstuffs.

Widal details a case of edema albuminuria, wherein both were creased by the addition of salt to dietary, and reduced when it was wi held, the edema disappearing enti ly when the salt was completely wi held. The edema was not influen by the amount of albumin inject Milk as a food was excellent in eder if given without salt. Even the co furnishing the milk for edematous tiens should have no salt. These resu were uniform on several patients w Bright's disease. Salt should be wi held from these patients.

Salt freely used impairs digesti and should not be used with cripp kidneys. It lessens the germicidal antiseptic powers of the gastric jui If not excluded from the dietary enti ly, it should be reduced to the small amount possible.

Diagnosis of Appendicitis.—W moth (*Am. Practitioner and New* says: "The diseases most commor taken for appendicitis are (*a*) leisio of the gall bladder and renal origi (*b*) lesions originating in the int tines and not of necessity involving t *appendix*; (c) tubo-ovarian disea

the three diseases we notice the following differences:

Appendicitis. — Pain peri-umbilical l referred to the epigastrium as well; s not radiate above these points. ted point of pain in right iliac fossa; sitiveness greatest in right iliac fosover McBurney's point.

Vomiting occurs, but is not present a rule.

Bladder and testicle symptoms very ely present.

Hepatic Colic.—Pain referred to the gastrium and radiates toward the ulder and the point of the scapula. rts from the region of the gall-bladas a fixed point.

Sensitiveness extreme below lower der of ribs; tenderness over galldder.

Vomiting frequent and intractable.

Bladder and testicle symptoms abt.

Nephritic Colic.—Pain radiates tord the groin and testicle, and somees to rectum, giving rise to desire go to stool, and tenesmus.

Sensitiveness greatest over pelvis of ney. If tenderness exist in front, it greatest over Poupart's ligament.

Vomiting not a frequent or promint symptom.

Bladder irritable, dysuria.

Mesotan in Rheumatism.—Dr. Fors Jurim (*Med. Times*) details sevl cases of rheumatic origin treated h a new remedy, mesotan, a salyc acid preparation for local use, and ieves it of special value. It is readdissolved in oils and glycerine, and application in 25 per cent. to 50 per t. solutions gives immediate results. an adjunct to other treatment it is cellent.

His authority for its use is as fols:

"The latter part of last year an article appeared, by Dr. Floret, in the *Deutsche Medicinishe Wochenschrift,* on a new local anti-rheumatic, a methyl oxy methyl ester of salicylic, named mesotan. It is a clear yellow fluid with only a faint odor, and dissolves in alcohol, ether, and fixed oils. That it is readily absorbed by the skin is shown by the rapid appearance of salicylic acid in the urine after its application, even when lightly rubbed in. Hence, we have here to deal with a remedy which exerts a direct action upon the rheumatic joints and muscles, which may replace, or, at any rate, aid the internal administration of the salicylates. As Dr. Floret's experiments related to over 120 cases, and the results obtained were remarkably successful, I determined to give the preparation a trial."

One advantage of the method of administering salicylic acid is the avoidance of the depressing effects of the salicylate on the heart.

The Treatment of Hemorrhoids with Adrenalin—(By Paul Paquin, M. D., Asheville. N. C.).—I have used solution adrenalin chloride in the treatment of two cases of bleeding hemorrhoids with unexpectedly good results. In both cases it was a *dernier ressort.* Both patients were tuberculous. In the first case there was an erosion of the mucous membrane, with several small internal hemorrhoidal tumors; in the second, there was chronic annoying strawberry-like condition that had existed for a year or more. I now have three cases of the first type under treatment and they are doing well.

Though I realize that certain rectal lesions will not yield to this mode of treatment, I am of the opinion, from my incidental observations, that adren-

alin will be of great service in the treatment of rectal diseases in general, and although my experience has been too limited to warrant my speaking with authority, I believe the results justify my desire to draw the attention of the medical profession to its possibilities in rectal surgery.

Segregation. — A handsome and roomy brick and cement building has just been erected in the Philadelphia Hospital grounds, in which are to be placed the families of patients suffering from contagious diseases, except smallpox. The patient himself will be taken to the Municipal Hospital, while his relatives are thoroughly sterilized in the new building. There are fifty rooms in the house, each ten feet square, for the accomodation of the occupants, and the receiving ward is separated from the living rooms by porcelain doors. The number of rooms allotted to a family will vary in accordance with its size, but all the families brought here will be made comfortable at the city's expense, during the period of their detention. Meanwhile the hom the family will be in the hands of board of health, and formaline was fused through the house for twenty- hours. In case the patient is suffe from smallpox, his family will be ta to the Municipal Hospital with hin *Journal Am. Med. Association*

Salt Productive of Cancer (Edito *Med. Times*).—Dr. Braithwaite (*L don Lancet*) thinks salt in connect with an excessive meat diet, especi of swine, is an essential feature in production of cancer. Jewish patie who eat no swine and but little salt exempt from cancer. Savages who no salt are exempt from cancer. domestic animals except the pig ha salt in their food, and the pig is the o one exempt from cancer. Wild c nivura are exempt, but when confin and fed salt develop cancer. Lar cancer areas are shown to use a d composed principally of salt mea This theory points more to preventi than cure of cancer.

BOOK REVIEWS.

THE MEDICAL NEWS VISITING LIST FOR 1904.—An Invaluable, Pocket-Sized, Wallet-Shaped Book, Containing Memoranda for Recording Every Detail of Practice. Being in Its Eighteenth Year of Issue, The *Medical News Visiting List* Embodies the results of Long Experience and Study to Its Development and Perfection. It is Issued in Four Styles to Meet the Requirements of Every Practitioner. Weekly, Dated for 30 Patients; Monthly, Undated for 120 Patients per Month; Perpetual, Undated, for 30 Patients Weekly per Year; 60 Patients, undated, for 60 Patients Weekly per Year. Th Weekly, Monthly and 30-Patie Perpetual, Contains 32 Pages of da and 160 Pages of Classified Blank The 60-Patient Perpetual Consists 256 Pages of Blanks Alone. Each i One Wallet-Shaped Book, Bound i Flexible Leather, with Flap an Pocket, Pencil and Rubber, and Ca endar for Two Years, $1.25. Thum Letter Index, 25 cents Extra. B Mail, Postpaid to Any Address. Le Brothers & Co., Publishers, Nev Pork and Philadelphia.

We are in receipt of the *Medica News Visiting List* for 1904, thorough

evised and up to date in every re-
t. It contains a scheme of denti-
; tables of weights and measures
comparative scales; instructions
examining urine; tables of eruptive
rs, incompatibles, poisons and anti-
s; directions for performing arti-
l respiration and ligation of arte-
In the record portion can be
id ruled blanks adapted for noting
letails of practice and professional
ness. We can say from practical
erience of a number of years that
is one of the most complete and
venient helps to the busy practition-
hat can be found.

ERNATIONAL CLINICS.—A Quarter-
of Illustrated Clinical Lectures and
specially Prepared Original Arti-
es on Treatment, Medicine, Surge-
, Neurology, Pediatrics, Obstetrics,
ynecology, Orthopedics, Pathology,
ermatology, Ophthalmology, Otol-
gy, Rhinology, Laryngology, Hy-
ene, and Other Topics of Interest
Students and Practitioners, by
eading Members of the Medical
rofession Throughout the World.
dited by A. O. Kelly, A. M., M. D.,
hiladelphia, with the Collaboration
Wm. Osler, M. D., Baltimore;
ohn H. Musser, M. D., Philadel-
hia; Jas. Stewart, M. D., Montreal;
B. Murphy, M. D., Chicago; A.
cPhedran, M. D., Toronto; Thos.
. Rotch, M. D., Boston; John G.
ark, M. D., Philadelphia; James J.
alsh, M. D., New York; J. W. Bal-
yntyne, M. D., Edinburgh; John
arold, M. D., London; Edmund
andolt, M. D., Paris; Richard
retz, M. D., Vienna, with Regular
orrespondents in Montreal, Lon-
on, Paris, Berlin, Vienna, Leipsic,
russels, and Carlsbad. Volume III.
hirteenth Series, 1903. Philadel-
phia: J. B. Lippincott Company.

Volume III. (13th series) of International Clinics contains much choice and practical matter. The symposium on diseases of the gall-bladder and gall-ducts, by John H. Musser, R. D. Rudolph (Edin), Charles G. Stockton, F. Parkes Weber, F. Lejars and John B. Deever covers the subject thoroughly and shows the marked advance made in this field of medicine and surgery within the last few years. The section on Medicine furnishes an elaborate article on malarial infections, in which the morphogenesis of the parasites is very clearly discussed; while in another paper the clinical types of pneumonia, including aberrant forms, are very ably handled; equally valuable is the discussion of clinical evidence of myocordial damage in rheumatic fever. The surgical clinic is up to the usual meritorious standard of the matter set forth in this valuable publication. Paper, binding, cuts and illustrations are of the high class which characterize the handiwork of the publishers.

THE JOHNS HOPKINS HOSPITAL REPORTS. Volume XI. Baltimore: The Johns Hopkins Press, 1903.

Volume XI of the Johns Hopkins Hospital Reports appears with the following contents: Pneumothorax: A Historical Clinical and Experimental Study by Charles P. Emerson, A. B., M. D.

Clinical Observations on Blood Pressure by Henry Wineman Cook, M. D., and John Bradford, M. D.

The Value of Tuberculin in Surgical Diagnosis, by Martin B. Tinker, M. D.

These reports are easily the most thorough and exhaustive of any that come from American hospitals, and this great institution has set an example which could be wisely and profitably

followed by many others of our land. It will be only by such meritorious work as this that it will be possible for American medical investigation to place itself on a plane with that of Europe. The entire set (11 vols.) of the Hopkins reports would be a valuable addition to any physician's library.

A Text Book of the Diseases of Women, by Thomas A. Ashby, Md., Professor of the Diseases of Women in the University of Maryland; Fellow of the American Gynecological Society; Ex-President of the Medical and Chirurgical Faculty of Maryland, and of the Baltimore Gynecological and Obstetrical Society; Honorary Member of the Medical Society of the District of Columbia; Consulting Gynecologist to the Mt. Hope Asylum, to St. Agnes' Hospital, and to the Hebrew Hospital of Baltimore, etc.

This is a well written work on the subject of which it treats by a teacher of this branch of medicine. The author's intention was to give to the profession a book that could be consulted by the student of medicine and the general practitioner, and in this he has admirably accomplished his purpose. A great deal has been put in the 650 pages of the volume, and nearly all of it is essential.

The introductory chapter is a historical sketch of Gynecology, from its earliest days to the present time, with allusions to many of the prominent workers in this field, and is very interesting, if not of intrinsic value.

A prominent feature of the book is the excellent anatomical descriptions given of each organ, prior to taking up the disease to which it is liable. The illustrations are numerous, are well executed, and they illustrate the text—something that cannot always be said of cuts.

The general practitioner, who m by reason of his surroundings, exam and often treat this class of troub will, we think, find this work a s guide. Special stress is laid upon di nosis, and the most approved plan treatment given, without confusing mind with a multiplicity of reme measures.

To the diseases usually treated in t class of books, the author has two ch ters treating of the diseases of urethra, bladder and uterus of wom and intestinal complications as belo ing specially to the domain of the gy cologist, the first of which is especia instructive.

The book is from the press of W liams & Milkins Company, of Ba more, and is well printed.

Stories of the Country Doctor, Willis P. King.

This new edition of an old favor appears again after an absence of s eral years, the original plates havi been destroyed by fire in 1898. T doctor that has not read King's stori should by all means supply himself w a copy and read it. There is some i formation and lots of philosophy, a an abundance of wit and humor co tained in the 360 pages of the book, a the best of all it is true to life, esp cially as the country doctor sees it his rounds. But few doctors will able to read it without recalling simil or parallel scenes within their own e perience. It will be equally enjoyal to the doctor's family, and to his p tients, or in fact, to any and every o who appreciates truth in humor or e joys a hearty laugh.

The illustrations are to the point, a

book is sold by the Clinic Publish- Co., of Chicago. Price, 50 cents.

The Popular Science Monthly, for cember, contains the following arti- s: "Recent Theories in Regard to Determination of Sex," by Prof. T. Morgan; "The Academy of Science St. Louis," by Professor William elease; "The Tetrahedral Kites of Alexander Graham Bell," by Gil- t H. Grosvenor; "Hertzian Wave reless Telegraphy," by Dr. J. A. ming; "The Salmon and Salmon eams of Alaska," by President Da- Star Jordan; "The Storm Center in Balkans," by Dr. Allan McLaugh- ; "The Growth of Rural Population," Frank T. Carlton; "Rear-Admiral W. Melville and Applied Science in nstruction of the New Fleet," by the Professor R. H. Thurston.

Everybody's Magazine (December, 03).—The new publishers of *Every- dy's Magazine* declare the holiday is- of the publication to be much the t they have yet produced. It is not typical Christmas number, made of stilted fiction and pictures of the tival in many lands. It is just an ecially lively and entertaining mag- ne, full of really good stories, clever tures, and well written and timely icles.

n *Everbody's* one never finds a dis- guished name tacked to a dull tale. Among its contributors are the ablest writers of the day, but it is in connection with their best work, not their pot-boilers. The reading public, which has become familiar with O. Henry, Juliet Wilbor Tompkins, and F. Walworth, for instance, will find in the holiday issue the most successful story each has written this year.

The other items in a long table of contents seem to be in the same category. In the midst of all this excellence, however, there are some really conspicuous features; notably, Booth Tarkington's "Boss Gorgett," the first piece of short fiction the author of "Monsieur Beaucaire" has written in the last three years. It is a political story giving the young champion of reform from the standpoint of the boss, and for comprehension of character and pure literary skill it must figure as one of the most powerful things Tarkington has yet done.

Another big thing the magazine has is Eugene Burnand's pictures of Bible scenes, reproduced for the first time in America. Burnand is the greatest painter of sacred subjects, since the old masters, and his studies of the Savior and the Last Supper are of extraordinary interest. In this number a new department, "The Players," a gossipy resume of theatrical doings, by Hartley Davis, set off with superb pictures of the stars and lesser stage luminaries, is inaugurated.

NEW BOOKS.

Messrs. E. B. Treat & Co., Medical blishers, announce that they have in ss:

The Blues (Splanchnic Neurasthe-) Causes and Cure.—This form of rvous Weakness is so common as render this volume of more than the- oretic interest. By Albert Abrams, M. D., F. R. M. S. 8vo., 230 pages, illustrated, $1.25.

Diseases of Metabolism and Nutrition; Part IV., Autointoxication. By Prof. Dr. Carl von Noorden, Physician in Chief to the City Hospital, Frankfort-

on-Main, and Dr. Mohr. Authorized American Edition. Edited by Boardman Reed, M. D. Small 8vo, 80 pages, 50 cents.

They have also recently issued the following books:

Plain Hints for Busy Mothers, by Mariana Wheeler, Superintendent of the Babies' Hospital, New York. Flexible leathette, 35 cents.

Treatment of Disease by Physical Methods. — Lectures on Electricity, Massage, Baths and Exercise. By Thomas Stretch Dowse, M. D., (abd.), F. R. C. P. (Ed.). 4th Ed., small 8vo., 454 pages, illustrated, $2.75.

Diseases of Metabolism and Nutrition.—A series of Monographs. By Prof. Dr. Carl von Noorden, Physic in Chief to the City Hospital, Franfo on-Main, and assistants. Authoriz American Edition. Edited by Boa man Reed, M. D., Philadelphia.

I. Obesity.—Small 8vo., 60 pag cloth, 50 cents.

II. Nephritis. — Small 8vo., 1 pages; cloth, $1.00.

III. Colitis.—Small 8vo., 80 page cloth, 50 cents.

Medical and Surgical Electricity.- Including X-Ray, Vibratory Therape tics, Finsen Light and High Frequen Currents. By A. D. Rockwell, A. M M. D. New and Enlarged Editio Royal octavo, 672 pages, illustrate ½ Mor. $6.00; cloth, $5.00.

Selections From Our Exchanges.

A Mosquito War at Suez.—That warfare against the mosquito may be successful, if it is waged thoroughly and relentlessly, seems to be shown by the results attained on the Isthmus of Suez, where the Canal Company has been trying for several months to exterminate the insects. A contributor to *Cosmos* says of this Isthmian mosquito war:

"A special service has been organized for the purpose. All cisterns have been given a thin coating of oil, which prevents the mosquitoes from breeding; and all marshes and ditches where stagnant water might accumulate have been drained. At the same time medicine has been distributed which, by curing the fever, diminishes the poisoned sources whence the mosquitoes obtain their virus.

"Owing to this, since last December the number of cases of fever has sensibly diminished from month to month, as compared with the numbers in corresponding months of previous years.

"These operations have gone on fo only a few months, and, of course, th *anopheles* have not completely disap peared; but the examinations of th specimens captured for this purpos shows that none were infected, which i doubtless to be attributed to the fac that the number of malarial patient has been reduced by proper medica treatment.

"The oiling of the cisterns and the active surveillance of all the places where the mosquitoes can breed have had another happy result—the *anopheles* are not the only ones that have suffered; these measures have also cause the *culex* to disappear so completely that even in the hottest days of the season it has not been necessary to use mosquito nets.

"The month of August is the malarial season at Ismaila, and only after this period can we tell whether the efforts that have been made are fully successful. It is to be hoped that they are.

Besides the immense advantage that be gained for the region itself, this eriment will show what can be done his line and with what chances of cess. A war of the same kind is g waged in Havana, but we do not know its results."—Translation le for *The Literary Digest.*

---

uman and Bovine Tuberculosis.—Fadyen, in *The Lancet,* reports the lts of experiments undertaken with ew of ascertaining in how far the an and bovine strains of the tuber- bacillus agree or differ as regards r effective properties for the mon- Eighteen monkeys were employ- The experiments consisted in in- ation with bovine tubercle bacilli, in feeding with human and bovine rculosis material. The monkey is eptible to an inoculation with the llus of bovine tuberculosis either ctly or after one passage through organism of the guinea pig. A cer- number of the animals died within days after feeding with bovine human tuberculous material. Nor- human sputum did not produce this t, and the result suggested some of intoxication. The monkey fed e, twice or once with bovine or hu- tuberculous material succumbed to neral tuberculosis in about one to months. The striking difference e effects produced occurred in the stive tract. Intestinal lesions were d in the case of every monkey that been fed with human material, e none of those fed with bovine ma- l showed any evidence of tubercu- intestinal ulcers. So that it would ar that virulent bovine tubercle ba- may pass through the intestinal wall rge numbers without any detectable n of the gut being produced. And further, that a food tuberculosis can be as readily brought about by the bovine as by the human strain of the tubercle bacillus in the young monkey.—*N. Y. Med. Jour.* and *Phila. Med. Journal.*

Vaccination and the Law.—Dr. Nelson G. Richmond, of Fredonia, read this paper before the meeting of the Medical Society of the State of New York. He said that it had been held by the courts that children could not be lawfully vaccinated without the consent of the parents, and also that unvaccinated children could not be admitted to the public schools. Much difficulty was experienced in interpreting the law in cases in which repeated vaccination proved unsuccessful, but the number of cases of these so-called "immunes" was steadily diminishing, and it was well known that successful vaccination not infrequently followed the fourth or fifth attempt, even though the previous efforts had failed. The speaker read a letter which he had received from Dr. John Thomson of Edinburg. In this the opinion was expressed that "the conscience clause" in English law had accomplished the purpose of its framers, *i. e.,* had diminished the opposition to vaccination. Dr. Richmond thinks that if vaccination had not been made compulsory, the opposition to it would have rapidly disappeared, just as had occurred with regard to the use of diphtheria antitoxin. He believed that the time had come to consider seriously whether it was better to have the vaccination law enforced or introduce a "conscience clause."

Dr. A. Jacobi declared that he had the right as a citizen to demand that the State should protect him and his from smallpox by compelling his neighbors to be vaccinated.—*Med. Record.*

Curable Albuminurias.—Lyon, in *Presse Medicale,* says: "Functional" albuminurias are still the least understood; their ætiology, treatment and diet are subjects of lively controversy. There are points of resemblance, however, in that the parents are usually arthritics, gouty, lithæmics, nervous and easily impressionable; the children are also nervous, subject to headache, insomnia, and a general atony of the tissues; gastroptosis is common, constipation, even colitis, not rare; they are either too fat or too thin; and the albuminuric syndrome exists. Functional albuminuria is hereditary. It is Lyon's opinion that the constitution itself needs treatment. Milk diet is not always successful; mixed diet is indicated, avoiding salt meats, salt fish, delicatessen, shellfish, fermented cheese, etc. From time to time liquid diet may be alternated. Drink should be limited and include the still mineral waters, wine well diluted, not infusions, but not tea. Sometimes raw meat gives strength. Rest is often advised in excess, but an hour daily on the back is good. Exercise should be moderate, avoiding gymnastics, but submitting to massage, and alcohol, water, or dry rubbings. Fresh air, especially at night, is of great importance, and Lyon advises enemata of physiological serum and sodium phosphate internally.—*N. Y. Med. Jour. and Phila. Med. Jour.*

Treatment of Suppurating Ulcers of the Cornea was the title of a paper read by Dr. Lewis H. Taylor of Wilkesbarre, at the meeting of the Medical Society of Pennsylvania, at York, Sept. 22-24, 1903. He said that many of these cases were caused by an injury being maltreated or entirely neglected to be treated for some time after its occurrence, and frequently infected by unclean bandages which the patient has applie the eye. The treatment should co of strict cleanliness, flushing the with boric acid or mild bichloride s tion and atropine, provided the ey seen before suppuration sets in. If ulcer is small, curretting and the a cation of silver nitrate, with pe cleanliness and the use by the pat at home, of atropine may be suffic but if the suppuration is extensive galvanic cautery is the most effi remedy. An ointment of the ye oxide of mercury in vaselin is valu as an aid to the healing. Tinctur iodine, he felt, was much more pai than the galvanic cautery, and its was not recommended.

Good Lay Advice to Young Ph cians.—If your patients were all r onable men and women, your would be easy; but they are not. E in their best estate they are not all r onable men and women, and you have to deal with them when they not in their best estate, but are mor You will have to deal with patients throw your medicine out of the win and still expect you to cure them one house with the mother busy other things and careless of the child; in another house with a mo whose weak and tearful sympathy much to negative the influence of y presence and the effect of your m cines. It is not enough for you k what your medical school has told y you must know men and women—t physical constitutions, their mental moral constitutions. You must un stand them, their life, their narrown their prejudices, their unreasona ness. You must see into them, you may minister to them.—*The C look.—Jour. Am. Med. Asso.*

Tuberculosis in the Negro.—Harris (*burn. A. M. A.,* Oct. 3) finds that death rate from tuberculosis is three nes as great for the negro race as for white race. This is for countries which the two races live together. is excessive mortality is not due to predisposition for the disease. Be- e the war tuberculosis was almost known among the slaves. It does occur on the west coast of Africa, cept where it has been imported by white race and acquired by the ne- es living a semi-civilized life. The ses that most powerfully contribute the spread of tuberculosis among the groes are shiftless living (poor per- al hygiene, overcrowding and insuf- ent food), syphilis, ghonorrhœa. The hor asserts that the negro's small g capacity, as compared with that of white, and his deficient brain capac- render him less resistant to the dis- e when once acquired. Unless the gienic and moral surroundings of race are greatly improved there is nger that it may become extinct. A uthern observer has stated that the dustrial revival of the South, by en- ing prostitution to become a pay- business, will, owing to increase in nereal diseases and the consequent in- ase of tuberculosis, end by causing negro race to die out.—*N. Y. Med. urn.*

Adrenal Extract in Hemorrhoids.—Breton has used this remedy in the atment of hemorrhoids. The pa- nts were affected with prolapsed or n-prolapsed hemorrhoids, reducible, bleeding profusely. Fifteen to enty minutes before going to stool patient introduced just within the us (not into the rectum) a tampon of sorbent cotton impregnated with a 1 1,000 solution of adrenal extract. From the very first application the hemorrhages ceased. After five or six treatments the hemorrhages were entirely stopped, and in some cases the prolapse was cured. In the case of hemorrhoids situated high up in the rectum suppositories containing the drug have given good results.—*Med. Record.*

Atropine in Cholera Infantum.—Wm. F. Waugh declares that as a stimulant in collapse atropine has no equal.

The dose for a child in the worst stage of cholera infantum, is a hypodermic of about 1-500 gr., and upward, for children bear larger doses of this agent proportionally to their age than adults. First the blood comes back to the brain, the face flushes, the pin-point pupils relax, the vomiting and purging subside, and the pulse can once more be felt. Morphine should not be given. The patient may be kept slightly under the influence of atropine continuously, while the alimentary canal is being flushed and disinfected and the cycle of the attack is completed. The application of ice or of any rubefacient to the neck over the pneumogastric aids materially in sedating this irritable region.—*Amer. Medicine, July* 25, 1903.

Suiciding English Physicians (*Modern Medicine*).—It is reported by the *Medical Examiner* that suiciding is coming to be remarkably common among physicians of Great Britain. The cause is claimed to be difficulty in obtaining a livelihood. The average income of the English physician is $2,000 a year, but it has been reduced to one thousand, and even this is hard to get, in consequence of the great number of physicians annually turned out by the medical universities.

Some Directions and Avenues Through Which Cancer May Possibly be Successfully Treated.—C. H. F. Routh calls attention to the fact that in a number of cases cancerous growths have disappeared spontaneously by exposure to atmospheric air. The cause of cure was undoubtedly the oxygen in the air. He reports two cases in which the application of peroxide of hydrogen induced a complete disappearance of the cancerous growth. He also speaks of the effects of vibration which have the power of hindering the growth of micro-organisms, and suggests that cancerous masses be singled out, and shocks passed through them. Possibly a cure might follow. As MacFayden has found that by crushing the bacterial cell it is possible to remove the contained poisonous juice, the real source of the disease, the author thinks that the method might be applied to the curing of cancer.—*Medical Press and Circular.*

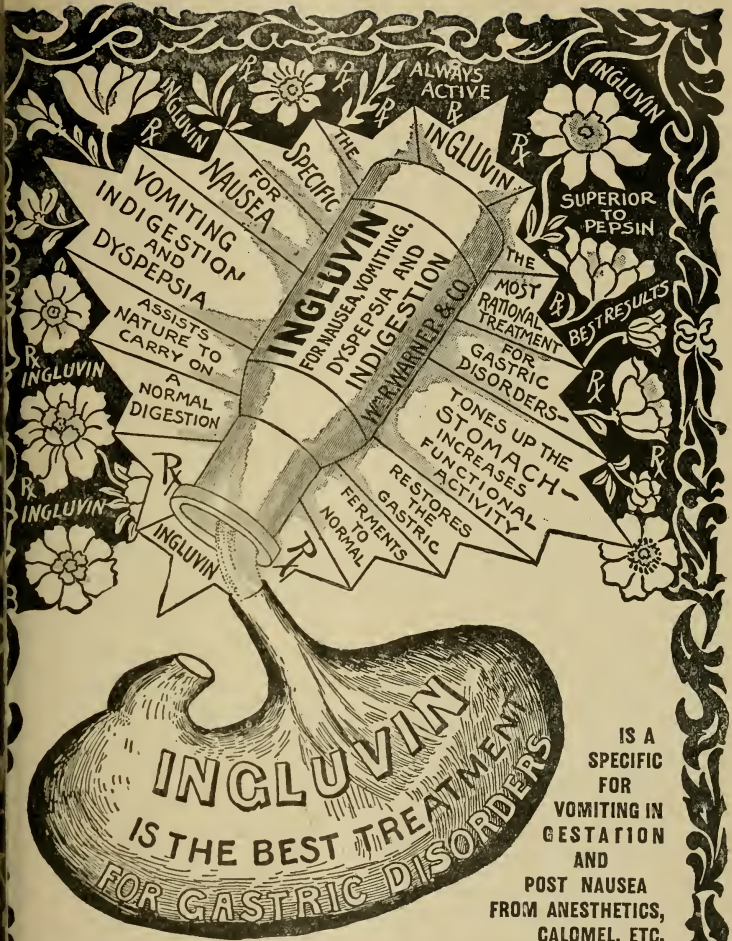
The Tonsil the Portal of Entry Pulmonary Tuberculosis. — Accord to Dr. E. Aufrecht, in the *Deutsc Archiv fur klinische Medicin*, 75, N 3-5, page 193, the main, and proba the commonest, mode of entry of tub cle bacilli by way of the tonsils. He l made a careful study of this questi anatomic and histologic, upon which bases his conclusions. In this case p monary infection is usually preceded enlargement of the cervical lympha glands, from which they are convey to the mediastinal glands. He sho by an analysis of the mechanics of pulmonary circulation, and of respi tion, that the circulatory activity in t lungs tends to counteract the invasi of the bacillus tuberculosis. This why active outdoor life is such a go preventive against this dread disea and why, contrariwise, sedentary indo occupation aids strongly its develo ment.—*The Medical Council.*

NEWER MATERIA MEDICA.

Palatable, Yet Effectual.—There is a widespread belief that physicians, as a rule, consider well-founded that codliver oil is not only a remedy of decided power, but a food of very high value. Every physician knows, however, that a very large number of patients who should, and doubtless would, get much good from it cannot or will not take it. This is largely due to the fact that the ordinary preparations are so nauseating as to cause serious digestive disturbances, while in many cases the stomach will not even retain them. It is notorious that the so-called "tasteless" preparations are indeed tasteless, because they contain no codliver oil, but there is a preparation that contains all the potent elements of codliver oil in form pleasant to the taste and agreeab to the weakest stomach. We refer Hagee's Cordial of Codliver Oil wi Hypophosphites of Lime and Sod Eminent physicians pronounce it triumph in modern chemistry, and pr scribe it when codliver oil treatment indicated. In our hands results with have been most satisfactory.—*Mass chusetts Medical Journal.*

Glycosine Phosphate. — Glycosir Phosphate is compound elixir of ce tain of the phosphates and digestive fe ments together with phosphoric aci and glycerine (see formula), base

(*Continued on Page 654*)


INGLUVIN
FOR NAUSEA, VOMITING, DYSPEPSIA AND INDIGESTION
WM. R. WARNER & CO.
THE SPECIFIC FOR NAUSEA VOMITING INDIGESTION AND DYSPEPSIA
ASSISTS NATURE TO CARRY ON A NORMAL DIGESTION
ALWAYS ACTIVE
INGLUVIN
SUPERIOR TO PEPSIN
THE MOST RATIONAL TREATMENT FOR GASTRIC DISORDERS
BEST RESULTS
TONES UP THE STOMACH
INCREASES FUNCTIONAL ACTIVITY
RESTORES THE GASTRIC FERMENTS TO NORMAL
Rx
INGLUVIN IS THE BEST TREATMENT FOR GASTRIC DISORDERS

IS A SPECIFIC FOR VOMITING IN GESTATION AND POST NAUSEA FROM ANESTHETICS, CALOMEL, ETC.

Is indicated in all Stomach Complaints, and is Superior to Pepsin, Pancreatin and other digestive ferments. It is active under all conditions whether the reaction of the gastric contents is acid, alkaline or neutral.

WHEN PRESCRIBING SPECIFY

WM. R. WARNER & CO., PHILADELPHIA, CHICAGO, NEW YORK, NEW ORLEANS.

THERAPEUTIC HINTS.

Suggestions in Surgical Practice.—Never sew up at once a wound that is badly crushed, or in which, for any reason, healing by first intention is unlikely to occur. Thoroughly disinfect, place the parts at rest, and remember the value of secondary sutures.

In injuries of the hands or feet, never be too eager to do a classical operation. Preserve as much palmar or plantar flap as possible, and be guided by the idea of restoring the best possible function, regardless of appearance.

Always wash and disinfect the meatus and glands in all cases in which instruments are to be introduced within the urethra. It serves little to have carefully sterilized the instruments if they are to be infected by contact with these parts.

Pressure on the edges of wounds with pledgets of cotton or gauze suffices to stop bleeding, as a rule, from all but the larger vessels. The assistant is less in the way than a number of artery forceps would be, and there is no bruising of tissues, hence more perfect union.

In vulvitis of little girls, always examine the discharge bacteriologically, but avoid awakening suspicions that may be unfounded. It may be due to thread worms, dirt, incontinence of urine, eczema of the pudenda or strumous ulceration, as well as to gonorrhœal infection. A blunt retractor may be readily made by bending the handle of a spoon to the proper angle. A sharp retractor is made in the household by bending inward the tips of the tines of a fork.—*International Journal of Surgery.*

Circumcision.—I wish to enter a p test against the custom of universal a indiscriminate circumcision of male fants. It should be the duty of the tending physician to reflect the prepu of all male children when they are month old, relieve the corona glandis the smegma present, annoint it w olive oil or vaseline, and replace t foreskin. This should be repeated 3 4 times monthly by the mother, and t parts cleansed.—H. E. Tulley, in *Ar ives of Pediatrics.*

Cancer, being a disease of the cons tution, cannot be adequately dealt wi by the knife only. Surgical measur need to be supplemented by medical a dietetic treatment, which attack the ro of the mischief. It is then possib that a cure may result. Conditio favorable to the development of the di ease are living in unsanitary houses upon a damp soil.—Dr. Bell, in *Briti Journal of Nursing.*

Antispasmodic in Cases of Asthma.—

Rx. Tinct. hyosciami .....
Spir. meth. com. aa30
Potasi iodidi 15
Syrupi 30
Aquæ menth. ...pip. add..15

M. S.—Two teaspoonfuls in wat every two or three hours.

—F. M. Moore.

Dropsy.—A dry diet is recommende to patients with renal dropsy. Restric tion of fluid in such cases does not in terfere with elimination, and it doe help to remove.—Hutchinson, *Me Record.*

What Is It *and* What Can It Do?

A Liquid Beef Tonic, including beef, iron, cinchona and brandy as its chief therapeutic constituents, may reasonably be regarded as capable of 'doing' a great deal. Let us form our opinion by considering separately its ingredients:

"*Meat Juice* is a valuable preparation when a powerful stimulation is required and the digestive forces are exceedingly weak."
H. C. Wood.

"That *Iron* performs a very important office is shown in the rapid construction of red blood-globules when administered in anæmia. It feeds to the blood a food which it needs."
Roberts Bartholow.

"*Cinchona* differs from other stimulants in the duration of its action, which is long-sustained and entitles it to be called a 'tonic-stimulant.'"
Alfred Stillé.

"As a food, *Alcohol* adds to the nutrition of the body by its prompt absorption, requiring no preliminary preparation by the digestive organs, which are therefore not taxed in any degree for its assimilation."
W. Gilman Thompson.

We feel it to be our duty to mention the fact that Colden's Liquid Beef Tonic [Ext. Carnis Fl. Comp. (Colden), Preparation No. 1] represents the combination of Beef, Iron, Cinchona and Brandy in their most eligible and active forms; while Preparation No. 2 (without Iron) is adapted to such cases as do not require a ferruginous tonic. Reports testify that it has been employed with most gratifying success for about thirty years by many of the best members of the medical profession. They have introduced it into their practice as a standard preparation of Extractum Carnis. We tell this for the benefit of a possible few who may yet be unfamiliar with the Tonic. Sold by druggists generally.

THE CHARLES N. CRITTENTON CO., Sole Agents for the United States,
Laboratory: 115 and 117 Fulton Street, New York.
Samples sent free, on application, to physicians.

(*Continued from Page 650*)

upon the teachings of Professors Dusort and Robin, of the University of Paris.

As it acts by stimulating and promoting nutrition, it is indicated in all wasting diseases, or diseases characterized by malnutrition, nervous debility, and weakened activity of the functions of the various organs of the body. It is especially indicated and its use is followed by brilliant results in three classes of cases:

First Class.—Indigestion in its various forms. For this class of troubles, physicians give it a strong endorsement. *The indigestion of consumption and alcoholics is greatly benefitted by its use.*

Second Class.—Elderly people, who are losing mental and physical vigor. To these, Glycosine Phosphate, by its power to increase nutrition, restores muscular strength and nerve energy. *In this class, its results (by prolonged use) are quite remarkable.*

Third Class.—People who are run down from any cause, such as dissipation, living under too high pressure, or from excessive work, whether of mind or body. By stimulating and promoting nutrition, Glycosine Phosphate brings back normal tone and vigor to the system. Glycosine Phosphate Co., 101 N. Main street, Salisbury, N. C.; 15 East Fayette street, Baltimore, Md.

M. A. Brinkman, M. D., New York, states: "As a sugical dressing, Glyco-Thymoline (Kress) has no equal for any ordinary wound. Say in a fairly aseptic condition, if any good absorbant gauze is soaked with Glyco-Thymoline (Kress) then packed in or on the wound and bound there, healing by first intention is the invariable rule—the dressing dries but still remains antiseptic to a degreee, and your glycerine ba tends to keep the gauze soft and to sufficient extent moist. When remo ing the dressing, if any particles a here to the edges of the wound I di solve them off with peroxide. Th dressing I have found to be entire satisfactory from every standpoint Address Kress & Owen Co., 210 Fu ton street, New York, N. Y. Mentic Carolina Medical Journal.

The Dietetic and Hygienic Gazett commenting upon the dietetic value c iron, says:

"Pathologists have given pointers a to the special condition of the iron i the system and in the circulating medi um, and the newer preparations aim t imitate that condition. Most of ther have a brief day of fame and the drop out of sight for the reason tha they lack some element of eligibility Few are standing the test of time an and the critical ordeal of the clinicians Foremost among these it is safe t name Gude's Pepto-Mangan. It i probably the nearest approach to a physiologic reproduction yet devised It deserves its universal popularity, and its manufacturers do well to restrict its sale to strictly ethical channels."

Head Colds and La Grippe, with congestion of the nasal mucous membranes will soon be abroad in the land. Frequent flushing of the nose with Glyco-Thymoline 1 part, warm water 3 to 5 parts, will always be followed by grateful relief. In treating acute cases, have the solution weak, 1 to 5, and warm, and you will not be disappointed.

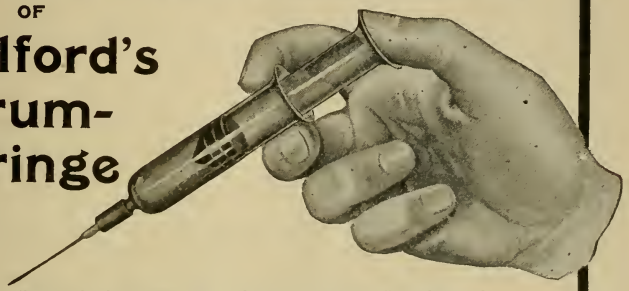
Nasal Catarrh.—From December to May, persons susceptible to cold in the head are frequently great sufferers. The profession is urged to give them

MULFORD'S ANTITOXIN SAVES MOST LIVES

Don't Experiment With Imitations

OF

Mulford's Serum-Syringe



For Administering Diphtheria Antitoxin

You know Mulford's Antitoxin—what it has done and can be depended upon to do; and you know how surely imitations fall short of the original, because they haven't the creative spirit behind them that makes standards.

You know how we have stood, from the beginning, for better, and surer, and safer Antitoxin and methods of using it.

Facts

1.—We were the first American firm to prepare a reliable Diphtheria Antitoxin.

2.—We were the first to offer Antitoxin of a high unit strength.

3.—We first protected absolutely the strength and efficiency of Antitoxin by dating each package, ensuring a reliable product.

4.—We originated the standardization of Antitoxin, so that each cubic centimeter of serum contained a fixed and definite number of Antitoxin units.

5.—We devised the first serum-syringe package for administering Antitoxin. Our Aseptic Glass Syringe was introduced in 1902, and has overcome every obstacle for the easy and prompt administration of Antitoxin. Air never comes in contact with the serum, nor is it possible to inject air into the patient.

So, whenever an imitation of Mulford's Antitoxin and Syringe is offered, ask yourself: Will it do the work as surely? Is it thoroughly aseptic? Is an imitation ever as good as the original?

To secure the best results, specify Mulford's Antitoxin. It "SAVES MOST LIVES"

relief. These cases need soothing treatment, by means of gentle yet efficient antiseptic. Write for a full size bottle of Iodoform-Vapor and try it on the first case of bad nasal catarrh that presents. No odor. Formula accompanying the bottle. Address Hargrave Chemical Co., Wilson, N. C., and mention this journal.

The Luekretol Chemical Co., of Winston-Salem, N. C., has recently made some changes in the personnel of its stockholders, acquiring ample capital to push the sales of their product, Luekretol.

Many good observers among the profession have given Luekretol actual test in Lucorrhœa and are pleased with the results. The low cost of the agent is also greatly in its favor. Address, for sample and formula, The Luekretol Chemical Co., Winston-Salem, N. Mention this Journal.

The attention of our readers is call to the advertisement of Robinson-P tet Company, which appears on pa 669 of this issue.

This house is one of long standin and enjoys a reputation of the highe character.

The preparations referred to, w commend specially to the notice of pra titioners.

Sharp & Dohme's Glycerophosphat Comp. will be appreciated as a food fo nerve tissue if you give it a careft trial. A pint bottle free if you pay ex pressage. Address Sharpe & Dohm 41 John street, New York. Mentio Carolina Medical Journal.

SUPERIOR TO THE BITTER ELIXIRS AND FAR MORE RELIABLE THAN THE SWEET SYRUPS OF QUININE IS

Quin-I-Pep-tone

Quinine, Iron and Pepsin Tonic.

Containing as it does the three sheet anchors of therapeutics, stamps it the Ideal Tonic—

Pleasant, - Agreeable, - Efficient.

PREPARED ONLY FOR THE MEDICAL PROFESSION

In Malarial, after the subsidence of the acute attack, it acts almost as a specific and will be found particularly adaptable in the convalescence of all fevers and especially of Typhoid. As a remedy and cure of Influenza and Anemias of different types, Quin-I-Pep-tone is being extensively and successfully employed by prominent men in the profession of medicine, which stamps it as the ideal remedy in all cases where a general tonic is indicated.

Literature Free on Request. **Supplied by all Druggists.**

THE AMERICAN PHARMACAL CO.

MANUFACTURING CHEMIST. **EVANSVILLE, IND., U. S. A.**

A Doctor's Epileptic Son.—My son doing splendidly; he has only had one roxysm in five months, which I am nfident was caused by reducing the se of Neurosine. I am determined persevere in this treatment. Am ving many inquiries from physicians to the merits of Neurosine and I commend it to those who have cases epilepsy.—Dr. G. W. Games, Hicky Flat, Ky.

---

rgle in Tonsilitis.—

Tinct. Guaici Ammon.....dr. vi
Tinct. Cinch. Comp.....dr. vi
Hux-sal (antiseptic salt)....dr. ii
Pulv. Acaclae .....q. s.
Aquae Distil .....ad. oz. iv
M. f. Mist.
Sig. Shake the bottle and add one aspoonful of the mixture to a wine-assful of water, then use as a gargle ree times a day.

The Decadence of Opium.—We ould not banish opium. Far from it. here are times when it becomes our fuge.' But we would restrict it to its roper sphere. In the acute stage of ost inflammations, and in the closing inful phases of some few chronic sorders, opium in galenic or alkaloid- derivatives, is our grandest remedy, ir confidential friend. But here, the plication should cease; and it is just ere that the synthetic products step in claim their share in the domain of erapy. Among the latter, perhaps ne has met with so grateful a recep-on as Antikamnia Tablets, and justly . Given a frontal, temporal, vertical occipital neuralgia, it will almost in-ariable arrest the head pain. In the rrific fronto-parietal neuralgia of laucoma, or in the rheumatic or post-perative iritis, they are of signal ser-ice, contributing much to the comfort

DOCTOR:

HAVE YOU USED LEU-KRE-TOL

THE NEW ANTISEPTIC

COMPOUND?

The Formula combines, under heavy trituration, the following drugs: Acinum Boracicum, Acidum Carbolicum, Menthol, Hydrastine Sulphas, Sodii Boras, Alumen, and Glycerinum. The powder will readily go into solution and is not only an Ethical, Scientific Pharmaceutical product, but also a pleasant, nor irritating and efficient preparation.

PHYSIOLOGICAL ACTION:

Antiseptic, Disinfectant, Deodorizer, Astringent and Antiphlogistic, reducing inflammatory exudates by its exosmotic action.

THERAPEUTICAL INDICATIONS:

Catarrhal conditions of nose and throat, tonsillitis, pharyngitis, hoarseness, etc. Usual ℞ being (Leu-Kretol ʒi Glycerine ʒiv Aquæ Q. S. ʒvi) either as Douche or Spray.

VAGINAL DOUCHE:

Especially valuable in Leucorrhoea, Vaginitis, Urethritis, Gonorrhœa, Pruritus, Septic conditions of Puerperal State, (being a superior remedy to Creolina, etc..) and in all offensive Uterine and Vaginal discharges. (ʒi to 1 Qt. of hot water.) Samples and literature on request.

Don't forget the name LEU-KRE-TOL.

Manufactured by the

LEU-KRE-TOL CHEMICAL CO.

Baltimore, Md.

Branch

Winston-Satem, N. C.

of the patient. Their range of application is wide. They are of positive value in certain forms of dysmenorrhœa; they have served well in the pleuritic pains of advancing pneumonia and in the arthralgias of acute rheumatism. They have been found to allay the lightning, lancinating pains of locomotor ataxia, but nowhere may they be employed with such confidence as in the neuralgias limited to the area of distribution of the fifth nerve. Here their action is almost specific, surpassing even the effect of aconite over this nerve.—*National Medical Review.*

Gonorrhoeal Epididymitis.—

R. Betul-Ol. (Methyl-oleo-salicylate Co.) .....oz. i
Ol. Amygdal. Dulc.....oz. ii
Misce fiat applic.

Sig. Apply to the scrotum on lint and cover with impermeable silk and a suspensory bandage. Change the dressing every two hours. The absorption of the salicylic radical is easily proved by an examination of the urine.

Battle & Co., Chemists, St. Louis.—

I have tne pleasure of telling you of a most remarkable experience had with the bottle of ecthol you kindly forwarded me last month. When I received the sample of ecthol I had been treating a young man for about ten days for what I diagnosed as ulcer of the stomach. For a year before coming to me he had occsionally seen dark colored blood in his alvine discharges, and now and then, he had vomited blood of a lighter hue. There was an indurated spot on the body of the stomach about twice the size of a silver dollar which had been giving him trouble for sometime. Could trace no history of cancer in his family. After putting him on teaspoonful doses of ecthol four time a day, he came to my office and smi ingly told me the hard spot was gon I examined him and found it to be tru During this last week he had been o ecthol alone. The vomiting had als ceased and he had gained in bodil vigor. Gave him a second vial of sam cautioned him as to eating and exercis and discharged him in fine spirits. wonder if this case can be matched?

JOHN F. NEAL, M. D.
Lytle, Texas, Oct. 14, 1903.

Use of Normal Salt Solution.—Sa solution is employed in all diseased con ditions associated with either hemor rhage or intense toxemia. In hemor rhage it replaces the fluid lost to th tissues and refills the blood vessels thereby giving the heart something o which to work. It stimulates the car diac ganglia; sustains the nutrition o the heart itself, rendering it possible fo the remaining blood to be propelled t the vital centers; and sustains life tem porarily until new blood can be formed It raises the temperature to the norma and relieves collapse. In toxic condi tions it excites diaphoresis and diuresis lowers the specific gravity of the urine increases phagocytosis, dilutes th poisons circulating in the bloodstream and by a process of cell-lavage remove the toxin from the paralyzed cell, al lowing it to resume its normal function —H. F. Thompson, in *Med. News.*

A Comforting Thought.—"So you are engaged to Dr. B——. It must be very nice to be engaged to a doctor. Every time he calls, you know—and, of course, that must be very often— you feel as if you were getting for nothing what everybody else would have to pay three dollars for."

Success Signs Worth Heeding

The regulation of the prima viæ is one of the essential basal principles of all therapeutics. Build on this as a sure foundation.

CLEAN OUT; CLEAN UP; KEEP CLEAN

TO "CLEAN OUT" USE ABBOTT'S SALINE LAXATIVE.

An ideal effervescent laxative or cathartic, according to dose used. It is pleasant to take, promptly efficient, and never gripes. In the rheumatic diathesis use Abbott's Salithia,—Tartrate of Lithium, in effervescent combination with colchicine. It is both pleasant and efficient.

TO "CLEAN UP" USE THE W-A INTESTINAL ANTISEPTICS.

A mixture of the chemically pure sulphocarbolates and the most perfect antiseptic for the alimentary canal yet devised. Try the W-A Vaginal Antiseptic for Leucorrhoea. It is the basis of the most successful treatment of Typhoid Fever and all enteric infective conditions; is a good thing in the right place.

TO "KEEP CLEAN" eat properly, live right and continue the use of the above as indicated.

I find your Saline Laxative the pleasantest and most efficient of all the Salines I have used.
New York. Dr. J. B. C.

Your "Salithia for Rheumatism" is a good hit. It hits the spot—pleasant and efficient.
Chicago. A. L. R., M. D.

The W-A Intestinal Antiseptic in my hands is the *sine qua non* in all bowel affections.
Kansas City. Dr. D. R. W.

My experience with your W-A Vaginal Antiseptic is very gratifying. Am also having excellent results from the use of your "Candle Bougies" in Gonorrhoea.
Chicago. Dr. C. M. C.

SAMPLES, PRICE LIST AND LITERATURE SENT ON REQUEST.

Our goods can be obtained of all principal jobbers, of most retailers, or direct from our laboratories at Chicago, or from our branches in New York and San Francisco. See below. We are headquarters for Alkaloidal granules and tablets—the largest exclusive manufacturers in America. Send for list.

Price List

Saline Laxative—Small, per doz., **$2.00**; medium, **$4.00**; large, **$9.00.**
Salithia—One size only, per doz., **$6.00**; single can, **55c.**
Intestinal Antiseptics—Compressed tablets, 100, **35c.**; 500, **$1.40**; 1,000, **$2.75.**

When ordered direct, goods are sent post-paid for cash with order.

THE ABBOTT ALKALOIDAL CO.

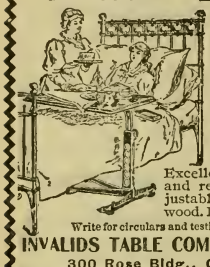
30 W. Broadway, New York. Ravenswood Station, CHICAGO. 13 Phelan Bldg., San Francisco

AGENTS WANTED

Who reside in North or South Carolina, to sell our goods to houses and stores. Money can be made. For terms and particulars address, with reference,

A. M. AKE,
119 Ninth St., Jersey City, N. J.

DID YOU EVER **ENJOY A MEAL IN BED?**



Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient

in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifullyfinished.

Write for circulars and testimonials.

INVALIDS TABLE COMPANY,
300 Rose Bldg., CLEVELAND, O.

Keeley Cure

For Drunkenness and Drug Using.

Please write us. Correspondence confidential.

Our Illustrated Handbook Sent Free On Request.

THE KEELEY INSTITUTE, Dept. B., Greenboro, N. C.

NEURILLA

SOOTHES, CALMS AND REGULATES THE NERVES.

INDISPENSABLE FOR NERVOUSNESS.

No bad effects follow its use.

DAD CHEMICAL CO., NEW YORK.

Consumption.—It cannot be t strongly insisted upon, that all who a prone to this disease must be kept much as possible in the open air. Ev at home this may be done by keepi all windows of sleeping rooms open their fullest extent, using proper clot ing to preserve heat, and during t daytime keeping the patient out doors, protected from the weather, matter what the circumstances of t patient are. Constantly we find su people confined to a close room, as the pure air were dangerous to breath Added to this the want of abundance nourishing food, and it is not to be wo dered at that the disease rapidly carri off the patient. In many instances, t moment the patient shows what is t nature of the ailment, we find him scr pulously secluded to his room. Th air, already foul, made more so by t presence of visitors, filth, tobacco, etc thus preventing the lungs from bein aided in their efforts to throw off th disease, in fact, increasing the pow of the poison by furnishing it a soil t grow in. Disinfection, cleanliness, fres air—all aid in preventing the progres of the disease and prolong life, if n curing the case.—*Public Health.*

Sending Money by Mail.—People o all classes throughout the country nee a convenient and safe form of currenc for mailing. The only perfect plan w have seen is that of the Post Check cur rency. Full information with illustra tions of the Post Check, instructions a to how each one can help the caus along will be furnished by the Pos Creck Bureau, 825 Vermont Ave. Washington, D. C.

lixir Maltopepsine with Glycerophosphates

(Tilden's)

RESPIRAZONE

(*Tilden's*)

Antiasmatic. Useful in spasmodic respiratory seases as Asthma, Hay ver, Croup, Laryngis- is Stridulus, Whoop- g Cough, etc.

ELIXIR

Iodo Bromide Calc. Comp.

(*Tilden's*)

The foremost alterative, perior in all Strumous, philitic and Cutaneous seases. Beware of sub- tutes. Get the Genuine d get results.

An ideal digestive and tissue constructive tonic of universal applicability in all wasting diseases and nervous disorders with faulty digestion, stomachic or intestinal. Furthers assimilation and growth of bony tissue. Each fluid dram contains Glycerophosphate Calcium gr 1; Glycerophosphate Soda grs. 2; Glycerophosphate Iron, grs 3-16; Glycerophosphate Manganse gr. ⅛; Glycerophosphate Strychnine gr 1-60; Maltopepsine grs 10 In dram doses is economic to dispense — very prompt results.

NARKOGEN

(*Tilden's*)

Hypnotic Anodyne Antispasmodic.

FORMULA:

Chloral Hydrate,	grs. X
Potass Brom.	grs. X
Hyoscine hydrobromate.	grs. 1/200
Narkine, (Tilden's)	grs. 88

FIRWEIN

(*Tilden's*)

An alterative remedy for Acute & Chronic Diseases of Throat, Lungs and Mucus Membranes in general.

Samples Sent to Physician's on Application.

Prepared expressly for Physicians' Prescriptions.

THE TILDEN COMPANY,

Manufacturing Pharmacists.

w Lebanon, N. Y. **St. Louis, Mo.**

Experience of Drowning.—The popar belief that death by drowning is e most pleasant one that an individl can experience has at last been ientifically refuted. A very interestg paper, recording his experiences nile drowning, has recently been pubhed in the *Edinburg Medical Journal* Dr. Lawson. This writer says that first the most striking thing was inise, intolerable pain in the chest: t seemed as if one were in a vice, nich was gradually screwed up tight til it felt as if the sternum and spinal lumn would break." Following this vful pain, there came a sensation as one were in a pleasant dream. Dr. wson says that before consciousness turned his sensations were positively easant, but what remains most vividly his imagination was the fearful agy of his attempts inspired during the st stage of his experience.—*Medical ge.*

STRAWBERRY PLANTS.

The Largest Stock in the World.
Nearly 100 Varieties.

All the choice, luscious kinds for the Garden and Fancy Market. Also Shipping Varieties. Also **Fruit Trees of all kinds to Growers at Wholesale Rates. We will save you half in planting an orchard.** Dewberries, Asparagus, Rhubarb, Grape Vines, etc., etc.

Our 120 page Manual, free to buyers, enables everybody to grow them with success and profit.

All plants packed to carry across the continent fresh as when dug. Illustrated catalogue free. Specify if you want catalogue of Shipping Varieties or fancy Garden kinds.

CONTINENTAL PLANT CO.,

Kittrell, N. C.

MEDICAL NEWS AND ITEMS.

At the recent meeting of the American Public Health Association, held at Washington, the committee on vital statistics reported that effective co-operation had been instituted between that Association, the Conference of State Boards of Health, the American Medical Association, the United States Census Bureau and the United States Public Health and Marine Hospital Service, for the improvement of the vital statistics of this country. Among the objects sought are the extension of adequate methods of registration, the use of uniform and comparable tables and rates in bulletins and reports, and the improvement of the international classification of causes of death. A pamphlet on "Statistical Treatment of Causes of Death" has been issued by the United States Census Bureau, requests for which should be addressed to Mr. W. A. King, Chief Statistician for Vital Statistics, Census Bureau. It has special reference to the difficulties encountered in compiling deaths returned from several causes, and asks for the co-operation of the profession in framing a thoroughly satisfactory method of procedure in such cases.

Dr. John B. Wright, of Granite Falls, N. C., recently lost his drug store by fire.

Philadelphia is experiencing an increase of smallpox in her borders.

In Indiana, the State Board of Health has passed an order excluding tuberculous persons from employment as school teachers.

In Prussia the authorities are endeavoring to prevent public exhibitions of hypnotism, magnetizing or suggestion.

St. Paul, Minn., claims a death rate of 9.2.

Dr. Albert Houck, formerly of I noir, N. C., has moved to Statesvil N. C.

In Italy, quinia bisulphate, standar ized by the government, is for sale e erywhere, being sold by the post offic in places without a pharmacy.

London's population has not increa ed as rapidly since 1891 as it did du ing the previous ten years.

Poor China! Aside from the plag of the Russians, her seaport town Peitang is suffering from cholera a the plague, 2,000 deaths having be caused by these dread diseases in tw months.

In Russia, the government is wagi war against tuberculosis and alcoho ism by issuing an instructive circula one for each, and distributing the gratuitously.

Alkaloids and Salines.—We have r ceived from the Abbott Alkaloidal Co Chicago, a neat nine-vial morocc pocket case of their alkaloids, also som of their effervescent Saline Laxativ This firm has met with a measure c success that would have been impossibl if their products had not been of th highest order and in a class by them selves.

The Reformation of Hot Springs Ark.—Advertising quacks and physi cians employing "drummers for prac tice" have long made Hot Springs in famous. The Federal Board will, i future, allow no patients of these "cat tle" to bathe in bath houses supplie with water from the reservation.

Yellow fever still prevails at Laredo Texas, and in Monterey, Mexico, wher there has been nearly 20,000 cases dur ing the past year. (P. S.—Since writ ing the above, frost has fallen and th dread disease has stopped its ravages.)

Conclusive Evidence

CHARACTER OF COMMENDATIONS

Woman

The subject of uterine disease reminds me that during the past six months I have
l my attention drawn to a remedy that goes under the name of Dioviburnia, the for-
la of which is given, and having read the emphatic indorsement of Drs. J. B Johnson,
Ch. Boisliniere and H. Tuholske, three of the most eminent professors and practitioners
he city, I was induced to give Dioviburnia a fair and thorough trial, and I am con-
ced that in this product we have a valuable addition to our armamentarium in our bat-
against the enemies of the noblest work of God—Woman.—Editorial by the late I. N.
e, M. D., in the *Medical Mirror*.

Pains of Dysmonorrhea

have given Dioviburnia a fair trial and
nd it useful as an uterine tonic and an-
pasmodic, relieving the pains of dys-
norrhea and regulating the uterine func-
ns. I feel authorized to give this recom-
ndation of Dioviburnia, as it is neither a
en'ed nor a secret medicine, the formula
which has been communicated freely to
profession.

L. Ch. Boislinière,

e Professor of Obstetrics, St. Louis Med-
al College.

Unquestionably of Great Benefit in Dysmonorrhea

I have used Dioviburnia quite a number of times, sufficient frequent to satisfy myself of its merits. It is of unquestionable benefit in painful dysmonorrhea; it possesses antispasmodic properties which seems to be exerted especially on the uterus.

Dr. H. Tuholske,

Prof. of Clinical Surgery and Surgical Pathology, Washington University; Prof. of Surgery, Post-Graduate School, St. Louis.

Neurosine vs. Epilepsy

prescribed Neurosine for a patient who
suffered from epileptic convulsions for
rs and it just the indications in her case
fectly; she has had only one convulsion
e she began the use of Neurosine and
was occasioned by her not being able
et a sufficient quantity from her druggist.

Dr. J. V. Sweeny.

ew York, N. Y.

---

desire to thank you for what your valu-
e medicine Neurosine has done for my
ghter, subject to epilepsy since a child
ourteen; every month she always has an
ck; commenced treating her with Neu-
ne; noticed a change after the third
e. Her sleep the first night after com-
ncing the medicine was more quiet and
ful. My daugter has only had one spell since using neurosine, which was caused by her neglecting taking the medicine the first of this month, therefore, she had to suffer for it. I thought it my duty to write and tell you the good your medicine was doing, not only to my daugter, but to two other young ladies, suffering from this disease —epilepsy. I spent hundreds of dollars for medicines for my daughter and can truthfully say Yours is the first medicine that has kept those dreadful spells off.

Dr. Ella Baker.

Indianapolis, Ind

I am meeting with every success to be asked in the administration of Neurosine (Dios) for epilepsy.

Dr. R. E. Calhoun.

Chesterville, Ill.

ll Size Bottle sent FREE to Physicians not familiar with the Merits of Neurosine and Dioviburnia, they paying express.

IOS CHEMICAL CO., St. Louis

Mikulicz on American Surgery.—Prof. Johan von Mikulicz-Radecki, lecturing at Breslau on Friday of last week on his recent trip to the United States, said he found more fruitful ideas among the American surgeons than among the French and English. He added: "The time is past when we were the givers and the Americans the receivers. The American character has as a fundamental feature unlimited self-confidence, and the American believes he can do anything he wishes."

The homeopathic practitioners of Germany recently presented a petition to the government asking that a chair of homeopathic therapeutics be established at the University of Tubingen. Strong opposition to the measure arose and the government refused to sanction the foundation of the chair.

The government of a Caucasian province in which typhoid fever is endemic has insured the lives of all physicians in the district against the fever. The fourteen physicians are insured for more than $5,000 each, two students for half this sum, and twenty-one health officers for about $2,000 each.

It is stated that Dr. Finsen, the Dutch scientist, who discovered and showed the value of the light which has been named in his honor, and who has spent years demonstrating its therapeutic value, is now in poor health, and has for this reason been compelled to give up much of his work in original research.

Some cases of bubonic plague have been discovered at Campos, State of Rio de Janeiro. Campos is a town and railroad station on the right bank of the Rio Parahjba, 137 miles from Rio de Janeiro.

It is stated that J. Ogden Armour will found a professorship in orthopedic surgery in St. Joseph's Hospital, Omaha, Neb. The endowment will $100,000, and the holder of the p fessorship will receive $5,000 per num.

An anti-cigarette league has b formed in Washington for the purp of presenting to Congress a monster tition urging the passage of a str gent law to prevent minors from us cigarettes or tobacco in any other fo

The thirty-first annual session of American Public Health Associat was held in Washington, D. C., fr October 26th to October 30th. T association represents the health thorities in the United States, Cana Cuba, and Mexico.

J. Stanley Grimes, prominent in early investigations of hynotism in middle of the nineteenth century, a for a time professor of medical ju prudence in the Castleton (Vermo Medical College, died at Evanston cently, aged 96.

The University of Chicago has cently purchased a part of the fam "Midway" for $1,000,000, and its m ical deparptment (Rush Medical C lege) is soon to begin the erection new hospitals and laboratories, to c nearly $10,000,000.

CUTS MADE BY THE MEMPHIS ENGRAVING CO. CUTS FOR ALL PURPOSES. MEMPHIS, TENN.

Engraved Invitations and Cards.

DR. C. A. MISENHEIME

CHARLOTTE, N. C.

Special Attention Given to Surg and Diseases of Women.

A Striking Antitoxin Demonstration.

Some days ago diphtheria broke out nong the inmates of the New York ate Reformatory at Elmira, and with- a week there were fifty cases and ree deaths, among those attacked be- g the assistant resident physician and hers of the official staff. On Novem- r 10 Dr. Robertson, the superintend- t, obtained a large supply of anti- xin from the laboratory of the State epartment of Health. Every inmate the institution was inoculated, and the following day Dr. Robertson re- rted that the epidemic had been com- etely checked.—*Med. Record*

Railroads throughout the country are aging war against the use of intoxi- ting liquors and tobacco by employes 10 are engaged in operating the lines. ie fiat has gone forth generally that ıployes who drink or frequent places ıere liquors are sold are not safe to rust with the lives of patrons, or th the valuable property transported the railroads.

Despite the fact that millions are be- spent on "new law" tenement uses, there are in Greater New York er 350,000 dark rooms without any ndows opening to the outer air or en to another room which itself has ndows opening to the outer air. oreover, these rooms are located in er 40,000 different tenement houses ttered throughout the different roughs. Under the law a large win- w, three feet by five feet, must be into each such room. A special and tematic examination of cellar living oms in tenement houses is to be made that those which do not conform to law may be vacated.

Chicago shows a considerable in- ase in the death-rate since 1891.

DR. E. R. RUSSELL

221 S. Tryon Street
CHARLOTTE, N. C.

HOURS:
8.30 A. M. to 12.00 M.
3.00 to 5.00 P. M.
Sundays 9.00 to 10.00 A. M.
Special Hours by Appointment.

Practice Limited to diseases of the Eye, Ear, Nose and Throat.

Dr. A. J. Crowell

Practice Limited to
diseases of the : :

Skin, Genito-Urinary and Rectal Diseases

Office No. 12 South Tryon Street
Over First National Bank.

Office Hours: 8 to 10; Afternoon, 2 to 4, 6 to 7.30.
Sunday, 8 to 10 P. M.

DR. W. O. NISBET

Diseases of Stomach

Office and Residence 15 East Seventh St.
(Dr. Irwin's former residence.)

OFFICE HOURS:

8.00 to 10.00 A. M. 11.00 to 1.00 P. M.
3.00 to 4.00 P. M.

Special Hours by Appointment.

PHONES: QUEEN CITY 102, BELL 2185.

W. H. WAKEFIELD, M. D.

203 N. TRYON STREET
CHARLOTTE, N. C.

PRACTICE LIMITED TO

Eye, Ear, Nose and Throat.

It is stated, says *American Medicine,* that the failure of the cod liver oil crop for four years has caused the Norwegian government so much concern that official bulletins have been issued about it. The failure is not altogether in the supply of cod, for about the same number are taken from the sea each year, but the cod that are caught lack nutriment. Most of them are half-starved, and do not weigh one-third as much as they should. Some of them are so thin that the livers (from which the oil is taken) are barely distinguishable. The coldness of the sea has killed the smaller fish on which the cod subsists. Hundreds of cod caught with lines are found to have been bitten by hungry seals. A bulletin recently issued by the Norwegian government says: "The condition of codfish is worse than ever. They have no livers to speak of. It is now requiring 40,000 fish to make a barrel of oil. This is without parallel in the history of our fisheries." So far as the trade is concerned, wholesalers are compelled to replenish their stock on almost any terms demanded.—*Med. Age.*

It is announced from Paris, says the *Journal of the American Medical Association,* that the chimpanzee successfully inoculated with syphilis this summer now presents the symptoms of the secondary stage. When Metchnikoff and Roux exhibited the animal at the Academie de Medecine, July 28, the primary chancre was recognized as specific by Fournier and others, and the eruptions, swollen glands, and enlargement of the spleen are now likewise classified as specific by experts, as Metchnikoff proclaimed at one of the meetings of the International Congress of Hygiene and Demography which has just closed its sessions at Brussels. Attempts to inoculate other monkeys from this animal, selecting those a degree farther r moved from man, have proved neg tive. It seems to be established by th research that the anthropoid apes alor are susceptible to syphilis.—*Med. Ag*

A Peculiar Verdict.—According t *American Medicine* a German court r cently made a peculiar award to Weis berger, a prominent surgeon of Fran fort, Germany, who was so severel injured in a railroad accident some tim ago that he had to cease practicing h profession. His claim for damages b ing submitted to a court of law, it wa ordered that the doctor shall receiv annually from the company 17,00 marks (about $4,000). The characte of the award rather than the amour has attracted attention among lawyer generally.

The Pennsylvania Society for th Prevention of Tuberculosis has mad new plans to educate the public cor cerning the hygiene of tuberculosi The society will try to reach the publi by posting regulations and instructior upon bill boards and street poles an by regularly publishing short article in the newspapers.

The Department of Charities of Ne York city has attempted to bring th advantages of the Blackwell's Islan Tuberculosis Hospital within reach c women who are prevented by household duties from residing at the hospita Mr. Folks has instituted a plan of da treatment by which these women re ceive open air and good food, wit needed medicines, during the day an return to their homes at night.

The International School of Hygien has selected one man from each countr in the world as a representative. D J. K. Shell, of Philadelphia, is invite to represent the United States at th next annual conference at Guttenber Germany, in 1904.

THE PRESBYTERIAN HOSPITAL

Will Receive all Classes

Of Medical and Surgical Cases,

(EXCEPT CONTAGIOUS.)

Full Corps of PHYSICIANS

and SURGEONS in Attendance.

Address,

PRESBYTERIAN HOSPITAL,

Charlotte, N. C.

CACTINA PILLETS

Has many Advantages over other Heart Stimulants

Each pillet represents one one-hundredth of a grain CACTINA, the active proximate principle of CEREUS GRANDIFLORA.

Dose:
One to four pillets three times a day

SAMPLES MAILED TO PHYSICIANS ONLY

SENG

Promotes Normal Digestion by encouraging the flow of Digestive Fluids
A Most Successful Treatment for
INDIGESTION

A palatable preparation of PANAX SCHINSENG in an aromatic essence

DOSE: One to two teaspoonfuls three times a day

A full size bottle, for trial, to physicians who will pay express charges

SULTAN DRUG COMPANY, St. Louis, Mo., U. S. A.

DR. A. M. WHISNANT,

No. 7 North Tryon Street,
Over Gray-Reese Drug Co.
CHARLOTTE, N. C.

¶ ¶ Practice Limited to Eye, Ear and Respiratory Tract.

Consulting Hours: 9 to 1; 4 to 6. Sundays by Appointment.

JOHN R. IRWIN, M. D.,

CHARLOTTE, N. C.

Special Attention Given Surgery and Gynecology.

When writing advertisers please mention this Journal.

Doubly a Doctor.—The Notre Dame University, at its recent commencement, conferred the degree of LL. D. on Dr. Martin F. Coomes, of Louisville, editor of the *American Practitioner and News.*

The table class of Dr. Wiley, chief of the Bureau of Chemistry of the Agricultural Department, composed of 12 young men, selected for the purpose of testing the effect of salicylic acid and other preservatives upon food, began the second experiment of the series. The experiment will continue for eight months, during which time the men will be boarded at the expense of the government.

Diminishing Birth Rates.—An esteemed exchange asks the question: Why is the birth rate decreasing so rapidly in the United States? The answer is easy—and in six words: Withdrawal, abortions, gonorrhœal salphingitis, gonorrhœal epididymitis.

The Doctor's Success Thoughts.—Mistakes are but mileposts along the highway to success. He who never makes a mistake never makes anything.

The doctor who tells the truth the oftenest is believed the oftenest.

To prevent misunderstandings with you patients, say just what you mean; use few words and be positive.

Dignity is all right, but it don't practice medicine when it chills your patrons. Keep close. Friendship counts.

Confidence and enthusiasm are as necessary to the successful doctor as to any other business man.

Professional wisdom depends on knowing how to do the right thing at the right time and how to do it well.

Don't tug and strain at theories—be plain, sensible, everday doctors.—*Alkaloidal Clinic.*

Treatment of Eclampsia.—J. M Howland (*Virginia Medical Semi Monthly,* October 9, 1903) says:

1. That more care of the pregnan woman is not only desirable but possi ble, even in the most sparsely settle communities.

2. That toxemia of pregnancy ma usually be prevented.

3. That severe toxemia of pregnanc need not in the vast majority of case result in eclampsia if properly treated

4. That immediate forcible dilitatio of cervix and delivery of child i eclampsia occurring in a pregnant wo man is not always justifiable.

5. That the early delivery of child i desirable when it can be accomplished without serious injury to the mother.

6. That the use of chloroform and morphine has probably been overdone

7. That the use of chloral, norma salt solution, hot pack, nitroglycerin and veratrum viride has probably been neglected or improperly administered

8. That, other things being equal the constant and intelligent attention o the physician during the whole period of attack (convulsions) will result in the cure of a very large percentage o cases.—*Med Age.*

We wish to solicit from our readers reports of unusual or interesting cases too brief perhaps, for a completely written paper, but suitable for recording under "Clinical Notes." Many matters of value to the profession can thus easily be recorded which otherwise will be neglected and never become available for further reference. We wish our pages to be utilized for whatever will be of benefit to the profession.

Elegant Pharmaceutical Specialties.

Attention is called to the EXCELLENCE and VALUABLE THERAPEUTIC PROPERTIES of these Preparations.

B

ROBINSON'S

HYPOPHOSPHITES

NUTRITIVE, TONIC, ALTERATIVE.

A STANDARD REMEDY in the Treatment of Pulmonary Phthisis, Bronchitis, Scrofulous Taint, General Debility, etc. Stimulates Digestion, promotes Assimilation.

℞ Each fluidounce contains:

Hypophosphites Soda	2 gr.
" Lime	1½ gr.
" Iron	1½ gr.
" Quinine.	¾ gr.
" Manganese ..	1½ gr.
" Strychnine	1-16 gr.

Dose—One to four fluidrachms.

6 oz. Bottles, 50 Cents.
Pint Bottles, $1 00.

This preparation does not precipitate—retains all the salts in perfect solution.

ROBINSON'S

PHOSPHORIC ELIXIR

A Modified and Improved Form of Chemical Food.

A Solution of the Phosphates of Iron, Sodium, Pottassium and Calcium, in an excess of Phosphoric Acid.

Each fluidounce represents:

Phosphate Sodium	12 grains
" Potassium	4 "
" Calcium	4 "
" Iron	2 "
FREE Monohydrated Phosphoric Acid	16 grs.

Each fluidounce is approximately equal to (30) thirty grains of Monohydrated Phosphoric Acid, free and combined.

Unsurpassed in excellency and palatability.

An invaluable remedy in the treatment of

Nervous Exhaustion, Incipient Paralysis, Deranged Digestion, Melancholia, General Debility, Renal Troubles, etc.

DOSE.—The average dose is a desertspoonful (2 fldrs.) diluted with water, to be taken immediately before, during or after meals.

Pints, $1.00.

D

ROBINSON'S

LIME JUICE and PEPSIN

Pure Concentrated Pepsin combined with Pure Lime Juice.

An exceedingly valuable Combination in cases of Dyspepsia, Indigestion, Biliousness, Heartburn and Mal-Assimilation.

APERIENT AND CHOLAGOGUE.

Impaired Digestion is the consequence of a sedentary life, coupled with nervous and mental strain.

Robinson's Lime Juice and Pepsin is one of the best Digestive Agents known. **Pure Lime Juice** with its aperient and cholagogue characteristics, with the Pepsin, furnishes a compatible and most efficient combination as a remedy for the disorders named.

Robinson's Lime Juice and Pepsin is palatable and grateful to the taste.

DOSE—Adult, desertspoonful to tablespoonful, after eating Children, one half to one teaspoonful, according to age.

Price, 6 oz. Bottles, 50 Cents.
16 oz. Bottles, $1.00.

ROBINSON'S

ELIXIR PARALDEHYD

10 PER CENT.

HYPNOTIC, SEDATIVE ANODYNE DIURETIC.
Indications: Sleeplessness, Irritability, Nervousness, Headache, Colic, Etc.

In doses of 45 grains, it calms restlessness and insomnia, and procures unbroken sleep of from four to seven hours duration, leaving behind neither languor, nausea, nor digestive disorders. It is proposed as possessing the good without the evil qualities of Chloral.

Our Elixir contains 45 grains of the Paraldehyd in each fluidounce, dissolved in aromaticmenstruum whereby the objectionable taste of the chemical is to a great extent disguised, and the preparation rendered palatable

DOSE—10 per cent. 2 to 8 fluidrachms.

Pint Bottles, $1 50.
N. B.—We also make 25 per cent. strength.
Price per Pint, $2.00.

WE NOW MAKE FLEXNER'S

Aloform, in Powder, per ounce	$1 25
Aloform, 5 grain Tablets, per 100	1 25
Aloform Elixir, pints	2 00
Solution Albuminate of Iron, Syrup Albuminate of Iron Comp., pints	1 00
Solution Albuminate Iron and Strychnine, Syrup Albuminate Iron with Quinine and Strychnine, half pints	1 00

Please specify ROBINSON'S Original Bottles. For sale by druggists.

ROBINSON-PETTET CO., Manufacturing Pharmacists, Louisville, Ky.

Founded 1842. Incorporated 1890. Pamphlets gratis to practitioners by mail upon request.

When writing advertisers please mention this Journal.

CATARACTS!

USE Succuss Cineraria Maritima. (BARNES'.)

Successfully used for removal of CAPSULAR and LENTICULAR CATARACTS, CORNEAL OPACITIES.

Does not cause Inflammation.

Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy:

"Mrs C—, aged 73. The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis: gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Succuss Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

Dr Osmon Royal, under date of June 4th 1903, writes:

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Succuss Cineraria (Barnes)."

Dr. E. V. Cobb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Succuss Cineraria Maritima (Barnes).

MADE FROM THE FRESH GREEN PLANT ONLY.

$1.00 per vial 2 drachm. $3.00 per oz. by mail, post paid.

Send for literature. Made exclusively by

THE BOTANIC DRUG COMPANY,

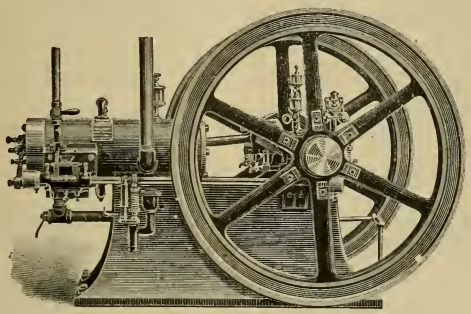
BRIDGEPORT, ALA., U. S. A.

Treatment of Vascular Tumors by the Injection of Water at a High Pressure.—Wyeth (*Jour. Am. Med. Ass'n.*) describes his method of treating vascular tumors by the injection of boiling water into the tumor mass by means of a piston syringe and needle. Following in the direction of Dawbarn's operation of cutting of the blood supply from tumors by ligating their nutrient arteries, Wyeth essayed to accomplish the same purpose by direct injection of coagulant media into the tumor mass. His first experiments were with paraffin and alcohol, neither of which agents accomplished the desired purpose when injected into the arteries of dogs. He found, however, that by injecting boiling water into the iliac artery of a dog that the artery and all its branches were occluded. The method was tried in the treatment of a congenital cavernous nevus of the chin in a patient, aged 20 years, with the result that after thr injections at separate seances, the p tient was entirely cured. This ca had been given up after an attempt excision by Hunter McGuire. He r ports also a successful result in t treatment by the same method of an a gioma seven inches in length in t scapular region of a child of nine year A third successful case was the obli eration of an angioma in the tempor region. In all these cases repeated a tempts had been made by compete surgeons to relieve the condition by t knife, but hemorrhage had caused t operator to desist.

The technic of the operation, as d scribed by Wyeth, is as follows: Und general anesthesia, from 2 to 6 ounc of boiling water are injected into t tumor at the site of entrance of the nu trient vessels, peripheral compressio being exercised to lessen the danger

GAS AND GASOLENE ENGINES

Available for all Power Purposes, and built in sizes from one to 100 H. P.



THE FAIRBANKS COMPANY.

"FAIRBANKS" STANDARD SCALES.

19 and 21 Light Street, - - - - - BALTIMORE, MD.

Write for catalogue and particulars.

ıbolism. A large or small needle and ringe is employed according to the ze of the tumor to be treated. It has en the experience of the operator at the patients suffer no pain on re- rning to consciousness after the oper- ion, although at the time of the in- ction the temperature of the overly- g skin has been raised to such a de- ee as to cause an assistant to remove s fingers therefrom. Boiling water jections have been used previously by ofton, of Virginia, in the treatment of morrhoids. Wyeth states that he in- nds to try the method in the treatment gonorrheal bubo, ranula, small cysts, scesses and lipomata.—*St. Louis urier of Medicine.*

The Carolina Medical Journal ways contains some valuable informa- n and experiences.

NOITOL

Is not a Salve, Ointment, Soap, Tar, or other disagreeable preparation, but a limpid, inoffensive, odorless solution, as its name *spelled backward* indicates.

SAMPLES GRATIS.

Redding, Cal.

Gentlemen:—I would not take ten times the cost of **NOITOL** and be without it. It is, without exception, the finest application I have ever used in Eczema.

F. P. MITCHELL, M. D.

The Most Successful Remedy for

ECZEMA

AS ALSO

For Skin Diseases Generally.

Wheeler Chemical Works,

2 State Street, Chicago.

Jefferson Medical Colleg

OF PHILADELPHIA.

New College Building and New Laboratories.

The Seventy-Ninth Annual Session will begin September 24th, 1903, and contin eight months. For four annual sessions the curriculum provides without extra fee: Practical manual training in ten different laboratories recently fitted up at heavy co 2. Recitations by the faculty and others. 3 Didactic lectures and demonstrations in t commodious new buildings. 4. Clinics and bedside ward work in small groups at the C lege Hospital, beside the clinics given by the staff of the College at the Pennsylvan Philadelphia, German, St. Joseph's and Municipal Hospitals. 5. Lying-in cases at t College Maternity.

A New Fire-Proof Hospital, with unrivalled facilities for clinical teaching, is n building at a cost of $700,000.

For circular and information, address **J. W. HOLLAND, Dean.**

University College of Medicine,

RICHMOND, VIRGINIA.

MEDICINE — DENTISTRY — PHARMACY.

Unity — — — — *therefore,* strong courses.
Concentration — *thereby,* strong teaching.
Method — — — *therefrom,* strong students.

CATALOGUE — 100 PAGES — ON APPLICATION.

Unciriariasis.—

I for long had believed that, concerning
my case,
There existed much popular hazi-
ness;
I for years had felt sure it was grossly
unfair
To regard as a failing my laziness:
Now the truth has come out, thanks to
good Dr. Stiles,
And 'tis proved how unjust a strong
bias is,
For I, if you please, for my idleness
scorned,
Have been suffering from uncinari-
asis.

—*Med. Standard.*

The Sterilized Kid.

Take up the babe from the sterilized
bed,
With sterilized gauze scour his steril-
ized head;
In sterilized tub give a sterilized bath,
And take him to walk on a sterilized
path.
Dress him in muslin or sterilized sil
Give him a breakfast of sterilized mill
Let him play only with sterilized toy
Have nothing to do with unsterilize
boys.
Use a sterilized bottle with a steri
ized spout,
Nothing unsterilized let lie about.
Get him at once a well sterilized nurs
And his finish will be in a sterilize
hearse.

—*Maryland Med. Jour.*

A SWEET POTATO HOUSE

that, in connection with important de tails, will keep sweet potatoes in goo condition 12 months.

A little late to order, but the pamph let the year round is worth much mor than the money.

Price of pamphlet 50 cents, postpai

BRYAN TYSON,

Box 80. , Carthage, N. C.

You will please give the name of th paper in which you saw advertisemen

B. T.

Vapo-Cresolene

Cures while they sleep.

Whooping Cough, Croup, Asthma, Coughs, Colds, Catarrh, Bronchitis, Grippe.

An antiseptic, antispasmodic and prophylactic, to be vaporized for the treatment of **Whooping Cough, Croup, Bronchitis, Asthma, Diphtheria** and kindred diseases of the throat and air passages.

It takes time to prove the value of a remedy: CRESOLENE has over twenty years behind it and the assurance of a vigorous and growing demand, besides the personal acknowledgment of many physicians, that it is the best remedy, particularly for **Whooping Cough** and **Croup** ever introduced. The application of CRESOLENE is simplicity itself. The Vaporizer acts from five to six hours without attention. The patient breathes the medicated air of the room. The treatment being by inhalation does away with the necessity of waking the patient, which, in itself, is of sufficient importance to warrant giving it a trial. **CRESOLENE may be used in connection with any other treatment,** and is used with success in the treatment of **Diphtheria, Scarlet Fever and Measles.** When used for the two former diseases a Membraneous Croup tent should be built around the bed. CRESOLENE is a product of coal tar of much greater antiseptic power than carbolic acid. Send for descriptive booklet, containing physicians' testimonials and price list.

NOTICE.—Physicians will be allowed a liberal discount, express paid on first order and money back if not satisfied.

THE VAPO-CRESOLENE CO., 180 Fulton St., New York.

Perioxide of Hydrogen as a Depilatory.—According to *Medicine,* undesirable hair, as upon the face of women, may be removed by successive applications of peroxide of hydrogen. Absorbent cotton is saturated with it, and kept in contact with the affected area for some time, say fifteen of thirty minutes. This may be repeated twice daily. There is prompt bleaching of the hair, thus making it less noticeable. The repeated applications destroy its vitality, a result of which it falls out. Inasmuch, however, as the hair bulbs remain unaffected, new hairs eventually reappear. This, though, is not a serious circumstance so long as the new growth can be promptly killed off by a reapplication of the method.

Will—Why are doctors like insurance companies?

Bill—Because they must keep you alive so they can live.

THE POPULAR SCIENCE MONTHLY

The contents of the Decembe Number include the following articles:

Recent Theories in Regard to the Determination of Sex. Prof. T. H. Morgan.

The Academy of Science of St. Louis. Professor William Trelease.

The Tetrahedral Kites of Dr. Alexander Graham Bell. Gilbert H. Grosvenor.

Hertzian Wave Wireless Telegraphy. Dr. J. A. Fleming.

The Salmon and Salmon Streams of Alaska President David Starr Jordan.

The Storm Center in the Balkans. Dr. Allan McLaughlin.

The Growth of Rural Population. Frank T. Carlton.

Rear Admiral Melville, U. S. N., and Applied Science in the Construction of the New Fleet. The late Prof R. H. Thurston.

The Popular Science Monthly has had few rivals and no equal in the educative service it has done done for the American people. A complete set of the volumes thus far published is both a history of science for the period covered and at the same time a pretty complete cyclopedia of natural science. There is nothing to fill its place, and to carry it on is a benefaction to the public.—W. T. Harris, U. S. Commissioner of Education.

THE POPULAR SCIENCE MONTHLY
Sub-Station 84, New York City.
$3.00 per Year, - - 30 cents per copy.

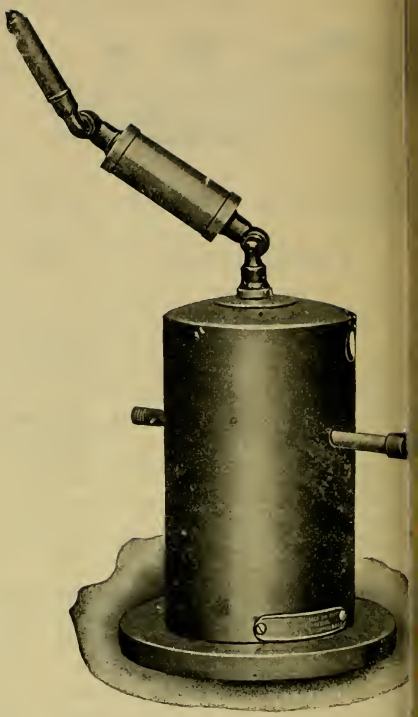
☞The Popular Science Monthly will be sent for six months for one dollar to new subscribers mentioning CAROLINA MEDICAL JOURNAL.

The Hopkins Compressed Air Heaters

Electric Gas Alcohol

The Perfect Instrument for treatment of the ear with superheated air. Practically indestructible. Patented in all features. All kinds of special electric heaters for medical work. Write for booklet.

THE TERRY HEATER CO.,
Cleveland, Ohio.

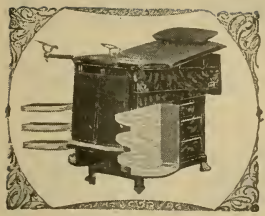
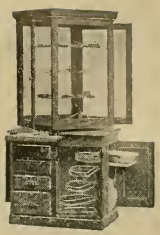


What Buck Duke's Salary is For.—James Buchanan Duke is president of the Consolidated; also he is president of the American and of the Continental Companies. His year's salary is $50,000 from each of the two tobacco companies proper. Once a shareholder, turning suilen, asked Mr. Duke what he did for these salaries of an aggregate one hundred thousand dollars.

"I'm not paid those one hundred thousand dollars," said Mr. Duke, "for what I do, but for what I don't do. I'm paid for the mistakes I fail to make."—*Everybody's Magazine.*

It is said that a proposition has been submitted by a representative of Chicago University to found an association of endowed university medical schools, somewhat on the plan suggested l Dr. Barker some time ago. A meeti has been called in Washington ne month, but only about half a dozen the leading schools have been invite It is understood that Johns Hopki objects to this narrow limit.—*Journ of the American Me ical Association.*

A bill has been introduced into t Pennsylvania Legislature which mak it unlawful for any person to participa in any athletic contest or exhibitic held within the State of Pennsylvan which shall continue for more tha twelve hours in each calendar day. T penalty imposed for violations of t act is a fine of not less than $100 more than $1,000, or imprisonment n exceeding two years, or both.—*Amer can Medicine.*

A WELL EQUIPPED OFFICE

Is an Essential Factor in Building Up and Maintaining a Good Practice.....

It not only provides more conveniences in your work, but wins the respect of your ients. Therefore, in the selection of your equipment you should exercise great care. e testimony of the leading members of the profession is that

THE ALLISON TABLES, CHAIRS AND CABINETS

the best and are adapted to all lines of regular and special practice. They are superior workmanship and design, and include more conveniences than any other line on the rket. (Catalogue "A" fully describes each article.)

W. D. ALLISON CO.

905 North Alabama Street, - - - - INDIANAPOLIS.

MAPLEWOOD

NEAR CINCINNATI, OHIO.

Sanatorium established in 1875 for the medical treatment of

DRUG AND ALCOHOLIC HABITUES

autifully located in the Miami Valley, thirty miles from Cincinnati. Easily accessible by train. Location unsurpassed. Excellent accommodations. Cure Guaranteed. No Restraint. Rates reasonable. For terms and full information address

APLEWOOD SANATORIUM, Dept. 21, Lebanon, Ohio.

---

50 YEARS' EXPERIENCE

PATENTS

TRADE MARKS
DESIGNS
COPYRIGHTS &c.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive *special notice*, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co. 361 Broadway, **New York**
Branch Office, 625 F St., Washington, D. C.

POLK'S MEDICAL REGISTER AND DIRECTORY

WAS ESTABLISHED IN 1886.

Do Not Be Deceived By Imitators.

See that the name R. L. POLK & CO.

IS ON THE ORDER BEFORE YOU SIGN IT.

POLK'S is the only complete Medical Directory.
POLK'S is the only Medical Directory having an index to all physicians in the United States.
POLK'S has stood the crucial test of time with increasing popularity. It thoroughly covers the field.

R. L. POLK & CO., Publishers,
DETROIT, MICHIGAN.

SUBSCRIBE NOW.

Iodoform Vapor

TRADE
(IODO-VAPO)
MARK

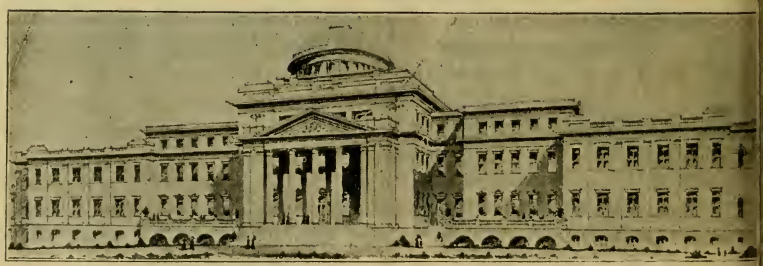
It is conceded that Iodoform is **unrivaled** as an antiseptic, the **one** obje tion to its use being its odor. Chemists in eliminating the characteris odor of Iodoform have always eliminated Iodoform. We have, in Iod Vapo, Iodoform mixed with other valuable and bland antiseptics in su proportions that the iodoform odor is completely disguised. This compou has proven itself to be almost a specific in treatment of **Catarrh** of the A **Passages.** It is applied by means of any good nebulizer. To prove t truth of our statement we will send to any licensed physician in the Unit States one full size bottle.

Sample and Formula sent on request.

HARGRAVE CHEMICAL CO.,
WILSON, N. C.

Presbyterian College for Women....

Charlotte, N. C



Magnificent New Buildings. Every Essential of Health and Comfort. Good Fare Experienced Teachers. Standard Advanced. Music and Art our Specialties. Charge lower than any other School of same grade in the South.

REV. J. R. BRIDGES, D. D., President.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."

THIS TESTIMONY SHOULD INSPIRE CONFIDNCE

Sufficient to get you to

Give Echols' Piedmont Concentrated Iron and Alum Water a Trial

Extracts from a few testimonials of home physicians and others:

"I am familiar with Echols' Piedmont Concentrated Iron and Alum Water, and regard it as a very fine tonic."—A. W. Terrel, M. D., Resident Physician at St. Andrew's Home, Lyuchburg, Va.

"I consider this remedy a very fine tonic for weak and debilitated persons."—J. E. Vaughn M. D., Lynchburg, Va.

"I consider it a most excellent remedy."—J. W. Dillard, M. D., Lynchburg, Va.

"I consider it a very fine tonic."—Rawley W. Martin, M. D, Pres Va. Medical Society, Lynchburg, Va.

"It gives me much pleasure to say that I frequently use your Concentrated Iron and Alum Water in my practice and find it satisfactory. I am generally unwilling to give testimonials to medical agents, but my high appreciation of this Water induces me to make this departure "—John Walker, M. D., Lynchburg, Va.

"I have used your Concentrated Water in my practice for years with fine results, and do not hesitate to recommend it for all diseases for which it is recommended especially diseases peculiar to females. It is with much pleasure I add my testimony to such valuable medicine, as I know this to be."—E. H. Murrell, M. D., Lynchburg, Va.

"Inestimable as a tonic and alterative.' —Hunter McGuire, M. D., Richmond, Va.

"Most valuable remedy for female diseases."—John P. Matteaur, M. D., LL. D., Va.

"Tonic, alterative, diuretic, one of nature's most useful remedies."—Medical Association of Virginia.

"Effective in certain affections of the liver, kidneys and bladder; also in scrofula."—Prof. J. J. Moorman, M. D., Virginia.

THIS WATER IS NOT A PATENT MEDICINE, BUT IS A NATURAL REMEDY IN CONCENTRATED FORM—160 TIMES AS STRONG AS THE NATURAL WATER, AND CONTAINS TWENTY DIFFERENT MINERALS.

We will send an 18 oz. bottle of same, free of charge, to any physician wishing to test it.

For Sale by All Good Druggists. 8 oz. Bottles, 50c. 18 oz. Bottles $1.

J. M. ECHOLS COMPANY, - - LYNCHBURG, VIRGINIA.

New York Polyclinic Medical School and Hospital.

Chartered by the University of the State of New York.

THE OLDEST POST GRADUATE SCHOOL IN AMERICA. ORGANIZED I 1881—OPENED IN 1882.

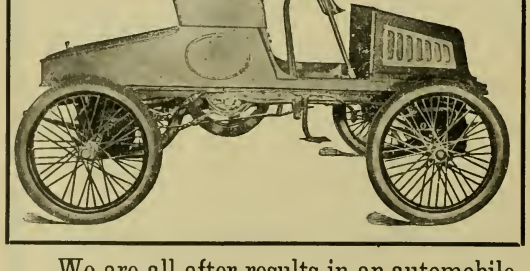
The New York Polyclinic is a school for teaching graduates th most recent methods of diagnosis and treatment in every departmen of medicine. The clinical material is abundant, and the hospital ward adjoin the lecture rooms. Since the fire in 1896, a new building ha been erected and thoroughly equipped, and the Institution is nov prepared to offer better facilities than ever. Students may enter a any time.

FACULTY:

SURGERY—Charles H. Chetwood, M. D.; Robert H. M. Dawbarn, M. D.; W. R. Townsend, M. D.; James Tuttle, M. D.; John A. Wyeth, M. D.
MEDICINE—Isaac Adler, M. D.; Morris Manges, M. D.; W. H Katzenbach, M. D.; J. D. Nisbet, M. D.
GYNECOLOGY—J. Riddle Goffe, M. D.; Wm. R. Pryor, M. D.; Robt. H. Wylie, M. D.; Brooks H. Wells, M. D. W. Gill Wylie, M. D., (Emeritus.)
PEDIATRICS—August Seibert, M. D.
DERMATOLOGY—Edward B Bronson, M. D.; Andrew R. Robinson, M. D.
OPHTHALMOLOGY—R. O Born, M. D.; W. E Lambert, M. D.; David Webster, M. D., (Emeritus).
LARYNGOLOGY AND RHINOLOGY—B. Bryson Delavan, M. D., Joseph W. Gleitsman, M. D.; Robert C Myles, M. D.; Francis J. Quinlan, M. D.
OTOLOGY—Frederich Whiting, M. D.
EUROLOGY—B. Sachs, M. D.
OBSTETRICE—Edward A. Ayers, M. D.

For further information write to
DR. W. R. TOWNSEND, Secretary, 214 East 34th St., New York

THE "ZENTMOBILE"



Where quality is desired, where comfort, durability and genuine pleasure is demanded in an automobile, this machine should be investigated before ordering.

We are all after results in an automobile, as well as everything else, and the best results are only obtained by years of persistent experimenting. We have passed through this stage. Don't buy an experiment. Get something that will require the least attention. It is a "ZENTMOBILE." - - - Get price and full particulars.

SINGLE CENTRE BUGGY COMPANY, Evansville, Indiana.

"No physician can afford to be indifferent regarding accurate filling of his prescriptions."